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Journal of the AMERICAN MEDICAL WOMEN'S ASSOCIATION

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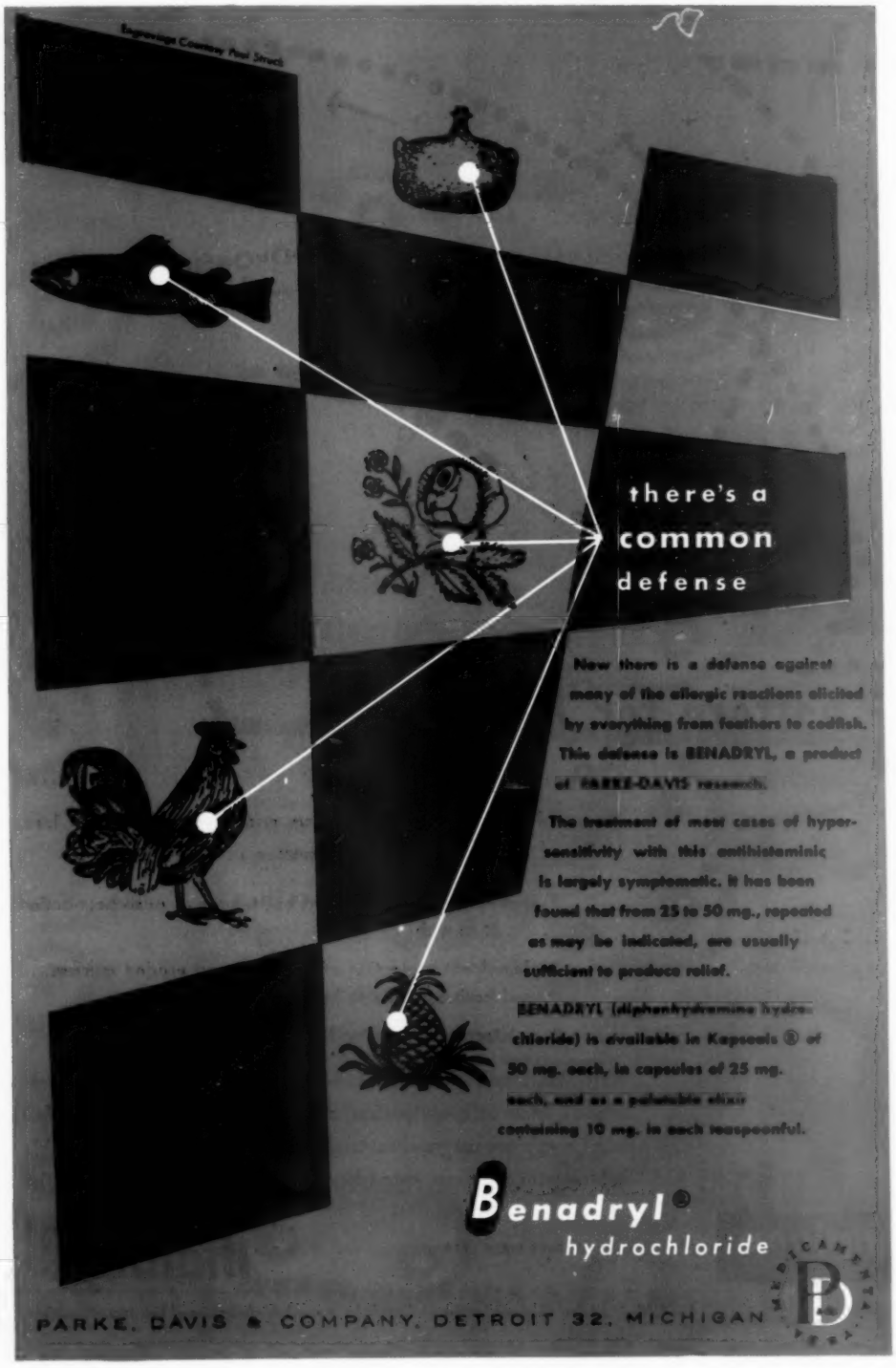
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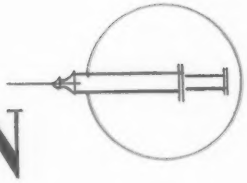

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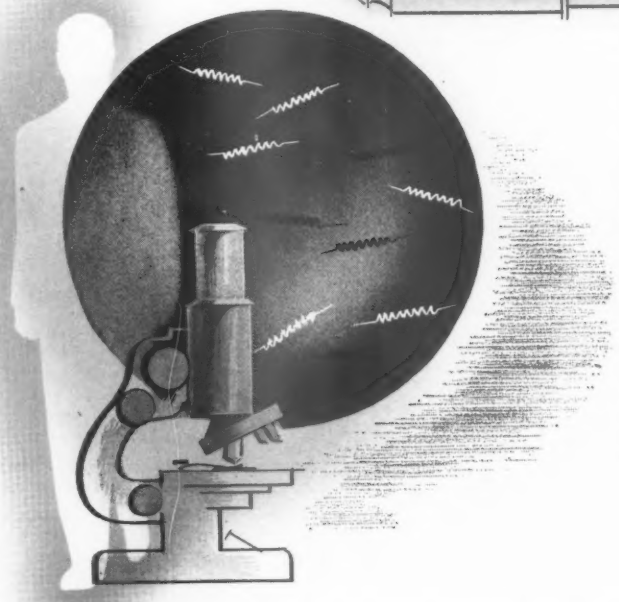

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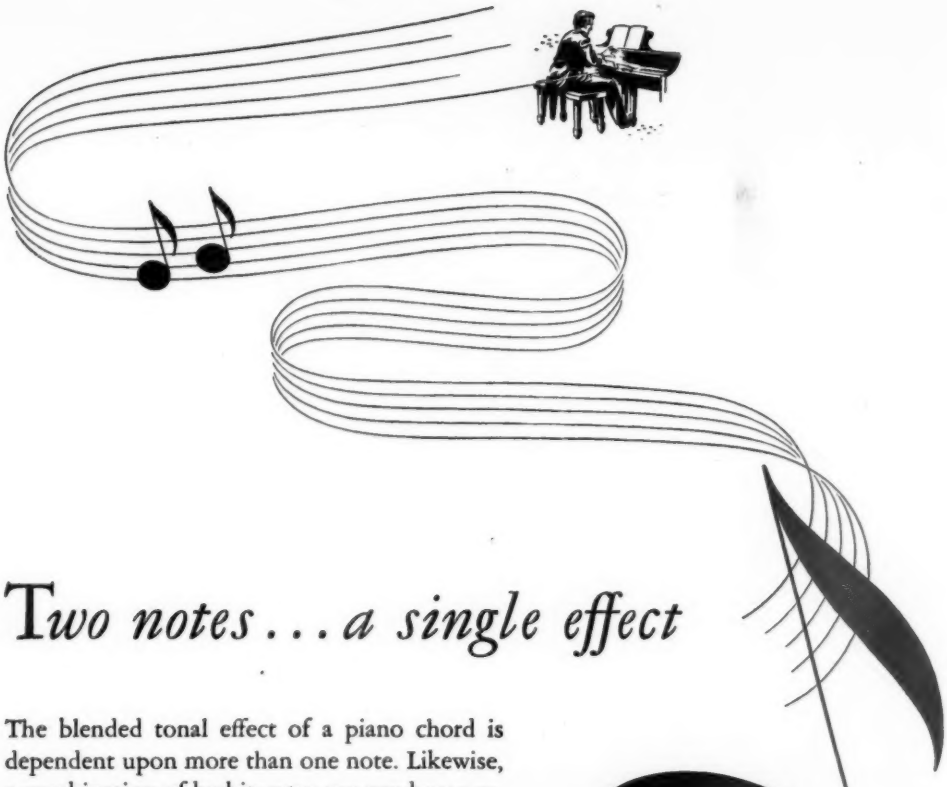

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EDITORIAL

CHRONIC ILLNESS

THE PROBLEM of the care of those suffering from chronic illness, whose needs are so graphically and sympathetically presented by Dr. Ellen Potter in this issue of the JOURNAL, is one that has become increasingly acute during the past twenty-five years and is likely to become even more pressing and more difficult of solution during the next generation. As has often been pointed out, the success of measures designed to improve public health in general has so advanced the average length of life that our population is no longer so youthful as in the past. There is thus an increase in the number of those suffering from diseases peculiar to, or at least more often encountered in the later years of life, and a consequent increase in the number of those who require nursing or hospital care.

It is agreed that there are not at present enough hospital beds available to accommodate all those suffering from acute illness and those suffering from the chronic diseases, and that to provide and maintain an adequate number would require enormous expenditures. Dr. Potter gives sane and courageous suggestions for steps which she feels must be taken to provide for the large group of chronically ill. It is to be hoped that her suggestions will be speedily acted upon.

In the City of New York an interesting experiment is now underway among this class of patients. This is the effort to provide for the needs of patients with chronic or "long-term" illness, which is being made at the Montefiore Hospital. Aided by generous grants from the Greater New York Fund and the New York City Cancer Committee, Dr. E. M. Bluestone, director of the hospital, has developed a program to supply medical and nursing care to patients in their own homes, without cost to those who cannot afford to pay. So far twenty-eight hospital patients have been returned to their homes but still kept under the guidance of the hospital staff. In the group are sufferers from malignant, cardiovascular, neurological, orthopedic, and pulmonary diseases. Dr. Bluestone hopes through this program to determine if extension of hospital service into the home will solve the problems of bed shortage, the excessive cost of providing new facilities, and emotional difficulties suffered by patients as a result of hospital confinement. It has already been shown that the cost of home care is only about one-third the cost of hospital care, and of course for every patient treated at home a bed is free for another patient in an early stage of the disease for whom hospitalization is necessary. The results of this constructive experiment will be watched with great interest.

This new activity, Dr. Bluestone believes, is epochal in its possibilities and opens up wide fields for useful communal service in which the modern hospital functions, namely, prevention, medical education, and research, are best carried out in such a combined intramural and extramural plan.

Yet, still, as Dr. Potter states, "the prevention of chronic illness, in its various forms, must be our major aim."

Dr. Potter is Deputy Commissioner for Welfare, New Jersey Department of Institutions and Agencies.

Methods of Securing and Maintaining Adequate Resources for the Care of the Chronically-Ill*

ELLEN C. POTTER, M.D., F.A.C.P.

NO ONE CAN DOUBT the present pressing need for the expansion of facilities for the diagnosis, treatment, custodial care, and special services for the care of the chronically-ill. Lack of these facilities is at this moment overwhelming county welfare boards throughout the country in connection with their old age assistance clients. For those engaged in public welfare administration the situation is desperate.

No one quarrels with the great progress made in the last forty years, which has increased life expectancy. In 1900, when I was still an undergraduate medical student, the life expectancy of the baby born that year was forty-nine years. Today life expectancy is nearly sixty-five years. We do challenge, however, the lack of statesmanship in the health and welfare fields which has permitted so large a proportion of our population, and an ever-increasing proportion, to be permanently handicapped by disease and defect, much of which might have been averted by early diagnosis and well-directed treatment and correction. Of what use is a long life to an individual or to society if that life is to be unsatisfying and unproductive and if the individual is to be a deadweight upon society?

We are, therefore, at a point in our social development when we must face courageously this problem, attacking it from two angles: one, that of *immediate provision* of certain types of facilities which are needed, and the other the *prevention* of the chronic diseases, which constitute, using the phrase of Dr. Boas, "the unseen plague."

*Paper delivered before the National Conference of Social Work, in Buffalo, New York, May 20, 1946.

What shall be our philosophy?

If we are to attack this problem successfully, we must have a philosophy which will act as a "gyro-compass" to keep us on our course in all weathers, and I can guarantee that the weather will often be rough. The philosophy which will sustain us is well stated by Franz Goldman, M.D.

> "This philosophy underlying modern health policy rests on two cornerstones: society's need of the fit and productive individual and the individual's right to health. This concept recognizes the reciprocity of health and economy; the interdependence of the individual and the state as well as their mutual obligations; and the need for social action substituting solidarity for isolated individual effort."[1]

Accepting this philosophy, we cannot and must not resign ourselves to the inevitability of the chronic diseases but must combine our efforts to the end that long-term illness and invalidism shall be prevented, ameliorated, or cured, or life made tolerable for those attacked.

Apparently public health and public welfare are ready to join forces in this battle; but the battle cannot be won without the marshalling of the forces of private philanthropy, the professions of medicine, nursing, and teaching, together with Federal, State, and local governmental departments, not only in the public health and welfare fields but in others, which we will speak of later. I emphasize governmental responsibility for, historically, whenever the need of the people in the fields of health, welfare, and education reach mass proportions, then the obligation has been accepted by our government to carry the major, but not the exclusive, responsibility for prevention and remedy, as in tuberculosis, mental illness, and education.

What are the basic facts which point to the

need for immediate action? They are spread on the record for all to see, and here they are:

Population trends and distribution by age as emphasized by the U. S. Census figures of 1920, 1930, and 1940, pointing up the ever-increasing proportion of the aged in the population and emphasizing the continuing increase in that proportion until 1980. Chronic illness increases rapidly with age and poverty but is *not* the misfortune of age alone; the child is among its victims.

Vital statistics reveal the steady and appalling increase in deaths from chronic illness, such as heart disease, arteriosclerosis, cancer, nephritis, but not including tuberculosis and mental disease. These statistics are available in every State. Chronic diseases in 1900 accounted for 30 per cent of all deaths, in 1940 the percentage was 64.

Social studies in health and welfare are available, as, for example, *Poor Relief in Pennsylvania* in the early twenties by the State Welfare Department, showing 90 per cent of the inmates in almshouses chronically-ill; *Chronic Illness in New York City* by Mary Jarrett[2], giving a comprehensive review and suggesting remedies; *Report of Chronic Disease in New Jersey* by Emily Frankel[3]; *The Magnitude of the Chronic Disease Problem in the United States; The National Health Survey, 1936*[4], *which provides us with* facts and ratios relating to the incidence of chronic illness by age and economic status, which can be a guide to all in local planning. Many other studies, too numerous to mention here, on state and local level also provide factual data and sound thinking.

Authoritative publications such as *The Unseen Plague—Chronic Disease*, by Dr. Ernst P. Boas[5]; current journals such as *Geriatrics*[6] and *Gerontology*[7]; and *Chronic Disease—A Problem in Philanthropy*[8] by Dr. E. M. Bluestone, to mention only a few, give us added information.

A great wealth of material is available, providing statistics, recounting experience, and providing guidance for those who hope to attack successfully the problem of chronic illness today.

How and in what spirit shall we plan our attack on the problem?

Whoever undertakes to meet the needs of the long-term patient must gird himself for a long struggle. He will be buffeted by opposition, or, what is worse, by apathy; and he will be defeated often by vested interests, public and private, which are unwilling to modify law or policy on behalf of this "unseen plague." The time has come, however, when one may gird himself with optimism.

One hundred years ago the time was ripe for government to accept responsibility for the care of the mentally-ill. (To our shame we have lapsed from that high purpose in our performance in the last decade and are bogged down with our seniles and arteriosclerotics, without psychosis, for whom psychiatric treatment is not indicated; and they are a dead weight administratively in the mental hospitals. We must plan to relieve that situation speedily. It is part of our chronic problem.) Sixty years ago the idea that we could prevent and cure tuberculosis was born. For twenty years government was slow in accepting responsibility. When citizens were aroused and joined forces with the medical profession in 1905, in the National Tuberculosis Association, then results were phenomenal. Sanatoria in fifteen years increased from 115 to 608, and tuberculosis leagues sprang up in thousands of counties in the United States.

Now the time is ripe for action to prevent chronic diseases and to provide facilities for care immediately. This involves the education of all our citizens. The recently published study of the voluntary health agencies[9] should lead to a revamping of many programs in the face of newly revealed needs.

On the basis of what we now know of chronic illness, the causes, varieties, incidence, in the young as well as the old, the rich as well as the poor, and the economic disasters which result from these diseases, we can rouse to action those who have power to help. *Let the people know the facts*—the numbers in this country (and in their own county) handicapped or incapacitated: by rheumatism, 6,850,000 with 147,000 invalided; by heart disease, 3,700,000 with 144,200 invalided, and ranking at the top of our mortality statistics; 930,000 individuals suffering from cancer and other tumors, with cancer ranking second only to heart disease in our mortality statistics. With all this ammunition available, we should be able, if united, to focus the attention of the philanthropic citizens and the legislative and administrative bodies on Federal, State, county, and municipal levels, for action to meet the need.

If more ammunition is needed to convince a reluctant citizen or legislator, then let him be told of the impact of chronic disease upon our social economy: that more than one billion days are lost annually from industrial and other usual employment because of chronic illness, more time than from any other cause; that the bill for outdoor relief is chiefly due to long-term illness; that chronic disease in the "relief" family is 48 per cent higher than the average for all income groups.

The National Health Survey shows that approximately one out of every five of the population suffers from chronic illness. We might reckon one in every family. (A recent round table conference held in New Jersey by the State League of Women Voters was engaged in discussing the need for more service for the long-term patient. The presiding officer asked: "How many of you know the problem of chronic illness as a personal family problem?" Every head nodded assent.)

Does this general personal concern point the way to an approach to the problem? It seems to me the answer is "Yes," and that in a group such as is assembled here this morning there might be hammered out a pattern for action *"substituting solidarity for isolated individual effort."* Gathered here are representatives of Federal, State, and local government interested in the problem; from public health, welfare, and education. from private philanthropy dedicated to special services; from councils of social agencies; from physicians, nurses, social workers, and interested citizens, and we are all involved in a search for a solution. Let us duplicate this marshalling for forces on the State and local level!

The framework of planning for action involves two major objectives; one is the long pull for the preparation of adequately-trained physicians, nurses, social workers, technicians, and public health officers in sufficient numbers, equipped to handle the many and complicated problems connected with the chronically-ill. The other is immediate: the establishment or expansion of the facilities which are necessary, and which can only be staffed today by such professional personnel as is available, for we must confess that rarely is the physician or nurse keenly interested in the care of the "chronic."

First: *Education of the professional team.* Education for the physician and nurse has for generations been geared to the diagnosis, treatment, and care of the acutely-ill. General hospitals have been equipped and staffed for that purpose, and the average length of stay of a patient is ten days.[10] Communicable disease hospitals were established for the isolation of patients when epidemics scourged the country. Now they stand with idle beds, communicable disease having been largely controlled.

If we are to be provided with physicians and nurses equipped to care for and interested in the long-term patient, we must enlist the interest and co-operation of State Boards of Licensure and the National Board of Medical Examiners. By the nature of their requirements for entrance to and the character of their examinations, they will react upon the quality of medical education in the universities and upon the scope of service of the interne in the general or special hospital. This will be no new departure in the field of medical education for within little more than a generation rotating internships, covering certain branches of medical sciences, have been required as pre-requisite to admission to state board licensing examinations.

Primary emphasis is placed upon the training of physicians in this area of medical diagnosis and treatment because the early diagnosis is of vital importance to prevention and the physician alone is equipped to provide it.

Boards of nurse examiners in many States have within recent years stipulated that in addition to the basic education in nursing there should be required affiliate work in communicable disease and mental hygiene nursing in specialized institutions. The time has now come when the Boards must place more emphasis upon the care of the long-term patient whose nursing needs will increase in volume for years to come, until the preventive program is successful. There is definite reluctance on the part of most nurses to undertake the care of the long-term patient. Perhaps the trained practical nurse must fill the gap at the bedside if our chronic patients are to be served.

The long-term patient needs the service of more skilled technicians than the average run of acutely-ill patients. The skills of physio-, hydro-, electrotherapy are essential to the treatment program, as is occupational therapy. The supply of these skilled workers is inadequate to the need and they must be multiplied.

The medical social worker as an essential member of the operating team must be recruited and trained in larger numbers than ever before. The visiting housekeeper must become a reality.

In addition, if "prevention" of chronic illness is to become a reality the public (and private) educational system must assume its full responsibility, applying the best we know in the field of health conservation, health education, and school medical inspection in every school district for every child, and sensitizing the teacher to the health needs of her pupils, as well as the personal health needs of the teacher herself.

So much for the skilled personnel essential to the program of prevention and care for the chronically-ill.

Second: *The specialized facilities needed immediately.*

What are the immediate objectives in terms of facilities which must be provided? Remembering that the rich as well as the poor suffer from chronic disease and that the rich are financially able to pay for the services they need (when these services are available), our first objective must be to provide adequate public funds through health and welfare public agencies, so that the needs of the indigent and "medically indigent" may be financed without unnecessary strain upon private philanthropic agencies where they exist or through public agencies and institutions. Such financing may ultimately resolve itself into a division of a national health insurance program, but presently it involves local, State, and Federal appropriations with which physicians, nurses, and others may be compensated for service.

How and where are the necessary facilities to be provided?

For the most part the sick are cared for in their own homes or in a hospital not too remote from the place of residence. therefore, the facilities must be reasonably close to the "grass roots." In the large municipality the community planning council or the council of social agencies may be able to stimulate the creation or expansion of needed facilities, but the plight of the sick in the small town or rural community is not so easy to solve. County or regional planning must be undertaken. It therefore seems essential that at the State level there should be created a master planning body appointed by the governor to dramatize the need, composed of representatives of the legislative body, the governmental agencies of health, welfare, education, housing, rehabilitation, crippled children's commission, etc., combined with representation from medical, nursing, hospital, and social service State associations, to which should be added citizen representation inclusive of organized labor and minority groups. A challenge to organized labor!

The "master planners" should draft no rigid pattern of organization or action to be applied to every community, nor should they bog down in time-consuming surveys which delay action.[11] Instead, having ascertained the facts relating to need, having learned from the experience of other States successful methods of meeting them, then, by visitation, consultation, and the spoken and written word there should be given to the local community the help it needs to plan for the care of the long-term patient. This work at the "grass roots" can be done through the established staff of governmental departments co-operating with local civic and governmental agencies.

New Jersey has as yet no master-planning body, but the State survey of hospitals* under the joint direction of the Division of Statistics and Research of the Department of Institutions and Agencies and the Division of Local Government of the Department of Health are giving special attention to the lack of facilities for the care of the chronic. They have provided an illuminating analysis of the population by counties based upon the standard ratios established by the National Health Survey so that each county may have some guide in its thinking as to the extent of the problem it must face.

In addition, the Department of Institutions and Agencies through the Divisions of Old Age Assistance and of Medicine and Inspection has pointed up the problem of chronic illness and no county welfare board or council of social agencies is unaware of the gravity of the situation and what should be done about it. The State League of Women Voters and the State Welfare Council are active in promoting understanding in this problem field.

Having provided finances for the purchase of service and for the State and local planning bodies, what facilities shall we aim to provide to meet the needs of a comprehensive program?

First comes the expansion of the general hospital to receive long-term patients in sufficient numbers and for a sufficient length of time to provide a stimulating experience for the attending, resident, and intern staff and for the student nurse in training. This may be accomplished by structural addition to the hospital or staff affiliation with a public or private institution. It has been estimated that not less than fifty beds are necessary to provide an effective treatment and training unit. Such an arrangement means that group practice, highly skilled, is made available for study, research, and treatment for the chronically-ill.

It is essential that an institutional population needing long-term care should not remain static; provision must be made through convalescent homes or nursing homes for the evacuation of those for whom no further treatment in the general hospital will be effective. Even more urgent than the need for expansion of general hospitals is the need for facilities which county or municipal government should provide for chronic illness which has reached mass proportions and government must shoulder the major part of the burden.

This opens up another field in which a primary

*Preliminary to planning under the Federal Hospital Construction Act, P. L. 725, 79th Congress.

responsibility must be placed upon government, namely, that of establishing, certainly upon the county (or district) level, and, when study proves the necessity, upon the State level, public institutions for the care and treatment of the long-term patient. These institutions may range from a completely equipped and staffed general hospital to an infirmary geared only to provide nursing and custodial care.

There are barriers which stand in the way of the establishment (or expansion) and use of such public facilities, including inertia on the part of county officials and, at the present time, their unwillingness to shoulder the costs unless there can be financial assistance from the State and/or from Federal sources, especially as it relates to the care needed by the ever increasing load of old age assistance clients.

The reluctance on the part of the Federal Security Agency to approve care provided in public institutions in which they will share the cost is based upon their knowledge of the traditionally inadequate care provided in old style county or municipal alms houses. This raises the whole question of the need for State standards and supervision together with State financial assistance which may be withdrawn if standards are not maintained.

Standards are not self-executing; therefore the State, preferably through its welfare department, must be vested with authority to establish standards and provide for inspection, supervision, and approval of program, management, and professional practice in public and proprietary institutions.

The "State master planning" body, therefore, must actively encourage the establishment of public institutions. It must also insure that the State department shall be vested with authority to license and supervise private proprietary nursing homes which are a necessary feature of a comprehensive program for the care of the chronically-ill who, in so many instances, thrive best and are happier in smaller groups and in a more home-like atmosphere than a large institution can provide.[12]

There are those who may disagree with me that the State welfare department is suitable as the supervising and standardizing agency. I am convinced, however, that because so large a fraction of the program of care for the chronically-ill is in the area of the social services, as contrasted with distinctively medical service (after the early diagnostic and treatment period is over), it seems obvious that the best *over-all* care will be rendered under the welfare department and I can say this out of experience in State departments both of health and welfare.

The key to success in any standardizing and supervisory program is found in the quality of the personnel in the public service charged with these responsibilities. They must be persons of integrity, with courage, diplomacy, and an educator's point of view; they should not be policemen carrying a big stick. In New Jersey we say that we are doing "case work with institutions."

Our field representatives combine a variety of skills, home economics, nursing, medical social work. The specialized services of other divisions of the department are freely available to them, as, for example, the architects on structural and safety problems, the State supervising food administrator, the psychiatric consultant, the chief psychologist, etc.

There is the closest possible relationship between the Division of Old Age Assistance and the Division of Medicine and Inspection and the division concerned with inspection of public institutions. This results in the development of safeguards in terms of the administration under county welfare boards, limiting overcrowding of licensed nursing homes and public institutions which, under pressure of great need, can so easily occur. This co-operation has provided for more adequate compensation for the nursing home operator based upon our knowledge of her operating costs in relation to the standards which we require. During the years of war this has resulted in a gradual increase from $60.00 to $90.00 per month authorized by the State. (In this increase the Federal Government does not share.) When it is realized that certain licensed nursing homes receive from their wealthy clientele a rate as high as *$100.00 per week*, it is evident that we are in a competitive market for service. This emphasizes the fact that we must not delay any longer in providing public facilities for the institutional care of the chronically-ill who need them.

Institutional care, however, is only part of the program with which the State planning body must be concerned. The vast majority of those suffering from and handicapped by chronic illness are living in their own homes or boarding homes; some are working in spite of handicaps.

At this stage of our development we may well look to private philanthropy for expansion and supervision of certain services for which the public agencies will compensate them, such as visiting

nursing and visiting housekeeper service. The case work service of family agencies may be called upon to supplement, especially in large cities, the work of county welfare board investigators whose case loads are excessive; moreover, not all of these workers are yet equipped to handle the intricate case work problems which are presented. All of these facts serve to emphasize the importance of a joint approach and working together of public and private social forces.

There is need for stimulation of the philanthropic homes for the aged by the State planning body, encouraging them to reconsider their traditional policy of receiving only "well" elderly people. In the face of the realities of today is there not need for liberalization of admission policy? May these homes not begin to think of themselves as social centers offering to the aged in the institution and to ambulant aged persons in the community a point of social contact and activity essential to the health, welfare, and emotional satisfactions of both groups?

Finally, housing! This is by no means the least important aspect of our problem. A very large proportion of the aged and of those suffering from chronic illness could lead an approximately normal life outside of institutions if the problems of stair climbing and of shopping could be met, and some social service and emergency nursing, easily available, could be provided at reasonable cost. Here we must call into our planning the Federal, State, and local housing authority (where the latter exist), and convince them that in future planning in group housing such facilities must be provided in small apartment units, with elevator service, social management, and a nurse on call. The Federal Housing Authority is giving serious consideration to this problem. In rural or village communities small unit colonies under social leadership as in Roosevelt Village, Millville, New Jersey, may provide an answer.

Having faced the realities of the situation we must no longer drift toward catastrophe. The time is now to provide the needed facilities for the care of the long-term patient and to embark hopefully upon a program of prevention or control of the unseen plague—chronic illness.

Summary

We are overwhelmed by the demand for facilities, trained personnel, and services for the care of the chronically-ill, young and old, rich and poor;

We are utterly unprepared to meet these needs on any count, but we know what must be done if the victims of long-term illness are to be served;

The mass proportion of need obligates governments, Federal, State, county, and local, to assume major responsibility, in co-operation with private philanthropy and professional groups, to act immediately and courageously to implement a program;

Prevention of chronic illness, in its various forms, must be our major aim today, the medical profession, the public schools, and state departments of health and welfare carrying a major responsibility.

In every State there is need for a representative "master planning body" to insure wise over-all coverage, and there are not less than ten departments, boards, and commissions on the state level in every State responsible for constructive action.

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The Blood Clotting Mechanism

Part III. Clinical Use of the Anticoagulants

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LOCAL ACTION of an anticoagulant is chiefly employed in vascular surgery. Not only is a fluid blood state advantageous from a technical standpoint but it is advisable in so far as possible until the integrity of the endothelial surface is re-established. Heparin is the anticoagulant of choice because of its immediate and short action. The technique of administering heparin in the surgical treatment of peripheral embolism, repair of peripheral aneurysm, and other special vascular problems has been described by numerous workers.[75,87]

Because of its inhibitory action on the deposition of fibrin, heparin has been used locally to prevent formation of adhesions. Intraperitoneal instillation of heparin in dogs[111] subjected to trauma and contamination resulted in a reduction in the number and extent of adhesions as compared with results in control nonheparinized animals. In the human, [112,113] intraperitoneal heparin has been used to control adhesion formation in patients surgically treated for recurrent intestinal obstructions due to adhesions. Blood coagulation time prolongation is maximal two hours after intraperitoneal administration and untoward bleeding is controlled by intravenous blood or protamine. The therapy is not without hazard as to hemorrhage, delayed healing, and infection, but results warrant further clinical consideration in selected cases.

The use of intrathecal heparin in the management of chronic influenzal meningitis has been reported.[114]

General or *systemic* anticoagulant therapy is now being used in three types of clinical conditions: (1) In the treatment of diseases in which intravascular thrombosis is an essential part of the condition, e.g., thrombophlebitis[115] and coronary thrombosis.[116,117,118] (2) In the prophylaxis and treatment of complications of thrombosis,[119,120] e.g., treatment of pulmonary embolism; prevention of chronic lymphedema by maintenance of patent venous collaterals;[121] maintenance of patent collaterals in acute arterial closure, arteriosclerotic gangrene, and trauma;[122] preoperative preparation of arterial occlusions to facilitate healing.[121] (3) In the prophylaxis of thrombus formation in the vascularly vulnerable or "susceptible" patient. By "susceptible" is meant an individual whose history includes a present or previous vascular disorder such as thrombophlebitis or polycythemia, or one who has had thrombosis as a post partum or postoperative complication.[121] Such a patient undergoing major surgery or partum deserves prophylactic anticoagulant therapy particularly if postoperative hyperprothrombinemia occurs.

The choice of anticoagulant depends on the needs of the clinical situation: how quickly inhibition of coagulation is desired and how long it is to be maintained. The chief clinical advantage of heparin lies in the rapidity and short duration of its action while its chief disadvantages are difficulty of administration, costliness, and discomfort to the patient. Dicoumarol is inexpensive, effective by mouth, and has a latent but prolonged action.

In order for anticoagulants to be used intelligently with maximal therapeutic effects and with the greatest margin of safety, several prerequisites are essential:

(1) The bleeding tendencies of the patient must be carefully evaluated. This includes history of previous facile or prolonged bleeding (postoperatively, from minor traumata, epistaxis), laboratory appraisal of the coagulation apparatus (bleeding time, coagulation time, prothrombin level, platelet count, blood fibrinogen), and status of the patient in relation to other factors known to participate in hemorrhagic phenomena (capillary fragility, vitamin C deficiency). Foci of potential hemorrhage must be carefully regarded.

(2) The presence of specific contraindications to anticoagulants precludes their use entirely. In general, anticoagulants should not be used if there is evidence of renal or hepatic disease; this is particularly true postoperatively. If the renal or hepatic status is in doubt, function tests should be done (concentration-dilution test, pitressin test, and urea clearance test; blood proteins, cephalin flocculation, cholesterol and bromsulfalein retention).

(3) Facilities for control of hemorrhage must

be available: for heparin, fresh whole (citrated) blood or salmine sulfuric acid; for dicoumarol, fresh whole (citrated) blood, plasma, or vitamin K (60-65 mg.).

(4) Facilities for determining the effects of the drug used must be available. With heparin, the clotting time of whole blood must be done every 15 to 30 minutes until the dose (intravenous drip method) is regulated, and every 3 to 4 hours thereafter as long as the drug is administered. It is necessary to know *for the test used* the normal range and the abnormal range indicative of potential hemorrhage. The Lee-White tube method is reliable with normal being 5 to 10 minutes and hemorrhage level being 30+ minutes. The capillary tube method from finger prick blood is unreliable at best, and furthermore the heparin-hemorrhage level of this test has not been established. Blood to be tested (as by the tube method) should not be obtained from the vein receiving the heparin, but preferably from one on the opposite side of the body.

For dicoumarol, a daily prothrombin time is necessary for as long as the drug is given and for ten days thereafter.[8] Prothrombin tests are not difficult to perform; but accuracy and, therefore, reliability demand meticulous attention to blood collection, technique, and reagents. The technical difficulties have been largely surmounted by a modification which eliminates variabilities in the environmental conditions under which the test is performed.[20] A relatively stable thromboplastin is now available, but variation in batches necessitate constant checking of the reagent.

Prothrombin times have been reported in two ways: (a) in seconds, and (b) in percentage of normal. This latter grew out of the unreliability, in earlier studies, of technique and reagent and the necessity of reporting the patient's findings in relation to those on "normals" run concomitantly as controls. At the present time with rigid technical control and reliable reagents, the actual clotting time of prothrombin in seconds is the simplest manner of expressing results. A dependable laboratory of necessity has to check its technique and reagents against "normals," but when the test is reliably done results are reproducible within 1 to 2 seconds and normal for whole (undiluted) plasma usually lies between 15 to 20 seconds.

It has been found that prothrombin determinations with diluted plasma often reflect changes in the blood prothrombin concentration more sensitively than undiluted plasma test,[20] supposedly by eliminating natural anticoagulant from the reaction by dilution. Most laboratories now incorporate a duplicate prothrombin determination made with diluted plasma (1:8 to 1:12 in saline) in the prothrombin test report. Normal for diluted plasma is usually about 40 seconds.

The coagulation time in a dicoumarol treated subject is prolonged. This effect, however, is secondary to general disruption of the clotting reaction and can not be relied on to indicate dicoumarol activity. In fact, a patient may have a marked prolongation of the prothrombin time, even into hemorrhagic levels, without abnormal variation in the clotting time. Bleeding time in the dicoumarolized subject is usually unaffected and has been found to remain normal throughout episodes of gross hemorrhage.

(5) Clinical follow up must be meticulous. Daily observations by both clinician and nursing service must be made for signs of hemorrhage (urine, stools, epistaxis, pulse rate). Since the kidneys are the most frequent site of dicoumarol induced hemorrhage, patients receiving dicoumarol should have a daily urinalysis for microscopic hematuria. With dicoumarol it is necessary that some *one* individual be responsible for the dose order and that each day's dose be decided on only after the prothrombin time for that day is known.[12]

Clinical follow-up includes also cognizance of concomitant medications which may increase bleeding tendencies. The salicylates are synergistic with dicoumarol. Histamine given in the course of a gastric analysis on a dicoumarolized patient was followed almost immediately by renal hemorrhage and epistaxis (possibly through superimposed capillary dilatation). The sulfonamids are compatible with dicoumarol and heparin. Whether or not sulfur containing compounds, such as thiouracil, potentiate the effect of heparin remains to be seen.

The *duration* of anticoagulative therapy is determined by the clinical need. In the prophylaxis of postoperative, or postpartum, thrombosis in the "susceptible" patient, doses of dicoumarol of 300 mg. the first postoperative day, 200 mg. the second, and 100 mg. the third, serve to abort thrombosis by preventing postoperative hyperprothrombinemia. On the other hand, a patient who has signs of impending thrombosis (decreased prothrombin time, irregular temperature curve, unaccounted for symptoms) or one who has had recurrent thrombophlebitis for years may require from 2 to 8 weeks of anticoagulant therapy. The drug of choice is dicoumarol which is administered in doses of 300 mg. the first day, 200 mg. the

second, with subsequent daily doses of 50 to 200 mg., or none, as needed to maintain the therapeutic effect. The use of heparin and dicoumarol together is permissible and is often indicated as in the emergency treatment of pulmonary emboli. In such an instance, heparin is started intravenously with coagulation times at appropriate intervals. Dicoumarol is simultaneously given by mouth. When the prothrombin time has become sufficiently elevated, heparin is discontinued and anticoagulation is maintained by dicoumarol alone.

Summary

The chemical and physiological mechanisms concerned in blood clotting have been outlined. The pharmacology and mode of action of the two more important anticoagulants, i.e., heparin and dicoumarol, have been discussed and their application to specific conditions, their limitations and contraindications presented. These two anticoagulants, heparin and dicoumarol, are valuable adjuncts to the management of thrombo-embolic disease, but their administration requires careful clinical and laboratory control.

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Tropical Medicine

Part XII—*Malaria*

CARROLL LaFLEUR BIRCH, M.D.

MALARIA IS THE MOST important disease in the world. Each year eight hundred million cases occur, which means that two out of every five persons in the world have malaria. In India alone, one hundred million cases and three million deaths are reported yearly. Malaria was the number one medical problem in World War II. Under General Wainwright on Bataan 85 per cent of some units had malaria. Early in the war there were eight hospital cases of malaria for every battle casualty. The total number of malarial infections in the armed forces may never be known, for many who were infected may not develop symptoms for several years. Stalker believes all persons who have been in highly malarious areas are potentially infected with malaria and should receive quinine prophylactically in times of stress, such as illness, surgery, accident, etc.

History

Malaria, or swamp fever, was known in ancient China and Greece. In 27 B.C. Rome had a population of one million. Malaria became prevalent. The mosquitoes bred in the Pontine marshes and the population declined. Malaria probably contributed much to the fall of Rome. It was not until 1920, after the marshes were drained under the direction of Dr. Hackett, that the population again reached one million.

In 1880 a Frenchman named Laveran, while working in Africa, first saw the plasmodia of malaria within the red blood cells of a man. Laveran's work was accepted slowly. It was not recognized in the United States until 1895. In 1897 Dr. Ross incriminated the mosquito as the vector of malaria.

Geography

Malaria is wide spread over the surface of the earth. Plasmodium falciparum is fairly well limited to the moist tropical areas; while P. vivax prevails generally from 45° N. to 40° S. of the equator in moist regions. In Europe, P. vivax extends to 60° N. and in the summer time is found as far north as Lake Ladoga, Russia. Malaria is present in the United States along the Gulf coast, in the lower Mississippi Valley, and in the southeastern regions east of the line having a rainfall of 30 inches per year. In 200 southern counties the death rate from malaria is over 25 per 100,000. There are approximately 5,000 deaths from malaria in the United States each year.

Malaria is common in Mexico, all the countries of Central America, the northerly three-fourths of South America, except the Andes region, all of Africa except the desert and the extreme southern tip, the tropical, the sub-tropical, and much of the temperate regions of Europe and Asia, northern Australia, and most of the adjacent islands of the South Pacific. No anopheles mosquitoes and hence no malaria exist on Tahiti, Hawaii, Fiji, Gilbert, Ellice, Samoa, the Leeward Islands, and others.

Types of Malaria

There are three common types of malaria:

1. Benign tertian, caused by P. vivax
2. Quartan malaria, caused by P. malariae
3. Malignant tertian, also called estivo-autumnal or tropical malaria, caused by P. falciparum.

Vivax malaria has a 48-hour cycle, malariae, a 72-hour cycle, and falciparum may have a 40-hour cycle or it may show no cyclic tendency.

The incubation period for vivax is 14 to 17 days, malariae 18 to 21 days, falciparum 10 to 12 days. Roughly the incubation period is equivalent to 5 or 6 cycles.

Malarial Cycle in Man

When a mosquito bites man it first injects a substance secreted from its salivary glands. In this secretion there is an anesthetic, so it can bite unnoticed, a vasodilator, so blood can be obtained easily, and an anti-coagulant, so the blood will

not clot in the proboscis. If the mosquito is infective, it also injects the sporozoites of malaria. After the sporozoites enter the blood of man they disappear from the peripheral blood. It is thought that the parasites remain in the reticulo-endothelial tissue of the visceral organs. This period is known as the exo-erythrocytic phase. In about five days a few plasmodia can be found in the erythrocytes. The number of parasites increases until enough have accumulated to produce symptoms.

The earliest stage of the parasite is the signet ring form of the trophozoite. In the stained smear this is seen as a tiny (2 to 3 micra) structure containing a single mass of red chromatin and a narrow bib of blue cytoplasm. The parasite grows until it becomes a mature trophozite and almost fills the erythrocyte. As soon as the chromatin divides the plasmodia becomes an immature schizont or presegmenter. The chromatin continues to divide until the number peculiar to that species is reached. Then the cytoplasm divides so that a bit of it surrounds each chromatin mass. The segmenter or schizont is then mature and contains a characteristic number of merizoites which fill the cell. This precipitates the rupture of the red cell and the freeing of the merizoites. The breaking up of a large number of erythrocytes, with the consequent liberation of toxins, initiates the chill. Most of the liberated merizoites enter other red blood cells and become the signet ring stage of the trophozoite. Thus the cycle is started again. It is plain that every 48 hours the number of parasites roughly is multiplied by the number of merizoites in the mature schizont. Some merizoites are destroyed by the monocytes. As the infection becomes chronic the monocytes increase and the resistance of the individual becomes greater. Phagocytes tend to engulf the free merizoites, thus reducing their number. This is host reaction to the parasite. The parasite reacts to this with the formation of gametocytes or sex forms of the parasite. The female is called a macrogametocyte; the male a microgametocyte. The gametocytes are the infective forms for the mosquito. An individual with gametocytes in the peripheral blood is a public health hazard.

Malarial Cycle in the Mosquito

When the female anopheles mosquito takes a blood meal from an infected individual and ingests micro-and macrogametocytes, the mosquito becomes infected. In the stomach of the mosquito the gametocytes become gametes by a process of maturation. In the microgametocytes this is known as exflagellation and results in the formation of microgametes with long lash-like processes of cytoplasm containing a mass of chromatin. The fertilization of the macrogamete by the microgamete results in a zygote. The zygote becomes a ookinete or active egg which penetrates the wall of the stomach and forms an oocyst on the hemocele side of the midgut. The oocyst develops into a sporocyst with the formation of many sporozoites. When the cyst is ripe it ruptures and liberates the sporozoites which float freely in the hemocele. Some sporozoites go to the salivary glands of the mosquito and undergo further development. At this time the mosquito becomes infective and is capable of infecting the next person it bites. As the parasite multiplies sexually within the mosquito, the mosquito is the definitive host and man is the intermediate host. Malaria then can be thought of as a disease of mosquitoes transmitted by man.

The three major types of malarial parasites can be differentiated from one another by a few outstanding characteristics.

In P. vivax infection the parasitized erythrocytes are enlarged and pale. There is a tendency to parasitize young cells. The parasite is active and has many pseudopods. As the parasite grows it breaks down the hemoglobin by using the globin and depositing the hematin. The hematin is seen as golden brown pigment granules within the parasite. Outside the parasite but within the red cell, Schüffner dots appear as pinkish orange stippling. The merizoites number from 12 to 24 in the mature schizont. The mature trophozoite, the schizont, and the macrogametocyte are large and almost fill the cells.

P. malariae has a tendency to parasitize old erythrocytes, so the parasitized cells look smaller than the others. This plasmodium is smaller and denser and takes a darker stain than vivax. It also contains considerably more pigment. In the trophozoite stage the parasite may be stretched across the equator of the cell, known as a band form. Eight merizoites clustered about a mass of pigment granules is characteristic for the schizont, known as a daisy form.

P. falciparum parasitizes old and young cells indiscriminately. The signet ring form is small and fine and may contain two chromatin dots. Multiple infection of erythrocytes is common. Some ring forms are seen on the margin of the cell, known as applique forms. Usually only ring forms and gametocytes are seen in the peripheral blood. In fact, the presence of intermediate stages is a bad prognostic sign. The gametocytes are diagnostic because of their characteristic shape. The macrogametocyte is crescentic

and slender, stains deeply, and has a single central mass of chromatin, while the microgametocyte is bean-shaped and stouter, and stains lightly; and the chromatin is scattered in multiple masses over the middle third of the parasite.

Besides the foregoing three important species of malaria there are two less important species known as P. ovale and P. knowlesi. P. ovale is uncommon. In many ways it resembles P. vivax. The parasitized cell often is crenated and tends to be oval in shape.

P. knowlesi causes malaria in monkeys, but it can infect man. It has been used for therapeutic purposes in the treatment of general paresis in the negro, who is immune to vivax malaria.

Although malaria usually is acquired by the bite of an infected mosquito the infection may be contracted in other ways. Transfusion of infected blood may result in malaria in the recipient. In morphine addicts a syringe and needle used commonly unsterilized among infected and uninfected persons will spread the disease.

Epidemiology

The epidemiology of malaria is simple. Only man and the mosquito are involved. There are no reservoir hosts. An epidemic of malaria threatens when there are:

1. Humans with male and female gametocytes in the peripheral blood.
2. An efficient anopheline host.
3. A sustained mean temperature of 60° F or over.
4. Abundant moisture.

In many regions the amount of malaria varies with the season, the temperature, the rainfall, and the breeding of the anopheles vector.

The degree of endemicity can be determined by making a malarial survey. This involves a study of the amount of infection in the human and anopheline hosts. Human study includes the spleen index and the parasite index.

The spleen index is the percentage of palpable spleens among the children of the indigenous population.

Under 10 per cent	... Low endemicity
10 to 25 per cent	... Moderate endemicity
25 to 50 per cent	... High endemicity
50 per cent	... Hyper endemicity

The parasite index is determined by the percentage of positive thick blood smears made from the children indigenous to that area.

Two indexes are taken on the anopheles vector. Female mosquitoes are dissected. The stomachs are examined for oocysts to determine the percentage of infected mosquitoes. The salivary glands are examined for sporozoites to determine the percentage of infective mosquitoes. If the mosquitoes are abundant a salivary gland index of 0.1 per cent indicates an important transmitter.

In a hyperendemic area the surviving population have acquired enough immunity to establish a balance between the host and the vector.

Mosquito Control

The most effective means of eliminating malaria is through mosquito control. There are two general systems. One attempts to put a barrier between man and the mosquito, the other to destroy the mosquito. The use of screens and mosquito nets is helpful. Individuals should be within screened buildings from sundown to sunup, for most mosquitoes bite during these hours. If this is impossible the clothing should be heavy and of material that does not cling to the skin; slacks tucked into boots, head net, and gloves complete the costume. Repellants and insecticides are useful. Formula 612 was used to advantage in the army. In the evening the living quarters can be treated with the fine fog spray of pyrethrum in volatile oil from a bomb.

Although measures are taken to eradicate adult anopheles mosquitoes major emphasis usually is laid upon the destruction of the larval forms in their favorite breeding places.

Anopheles control must be individualized for each species and in each community, because breeding and resting habits vary not only with the species but also with the locality. Anopheles breed in the bayous of Louisiana, the briny lowlands of Florida, the lime sinks of Georgia, the swamps of Panama, the tree tops of Trinidad, the rice fields of China, and the streams and pools of Burma and New Guinea, the irrigation ditches of India, the oases of the Sahara, the water jars of Arabia, and the cisterns of Calcutta. They breed in the crab holes on the beaches, in the foot prints of cattle in a boggy pasture, in mineral springs, in low land and high land, any place where there is abundant moisture and the temperature does not drop much below 60° F. Some breed in clear water, others where there is vegetation. Some breed in still water, others in the eddies of rapidly moving streams. Anopheles control is successful only with species sanitation.

Symptoms

Vivax malaria usually presents the classical picture of chill followed by fever and sweat every other day. At the onset of the disease, however, the paroxysms may occur daily and later assume the characteristic periodicity.

Each paroxysm begins suddenly with rigor followed by a fever to 104° or 105°. The pulse

rate is increased accompanied by headache, nausea, and vomiting. The face is flushed, the skin is dry and hot, and there may be mild delirium. This is followed by a profuse sweat; the temperature and pulse rate drop to normal or below. Extreme weakness and profound sleep follow. The duration of the paroxysm is 8 to 10 hours. Vivax malaria is the most common type and is prevalent in subtropical and temperate regions.

In infection with P. malariae, the paroxysms are similar to those of vivax but they occur every 72 hours. Because the cycles are longer and the number of merizoites smaller the parasitism with P. malariae builds up more slowly. The paroxysms are less severe and of shorter duration (4 to 5 hours). Quartan malaria is less common than vivax or falciparum. It is found in isolated patches widely scattered over the malarious areas of the world.

In both types the spleen becomes enlarged. There may be a generalized adenopathy. Herpes about the lips is common as is pain in the region of the spleen.

Falciparum or malignant malaria is a much more dangerous infection and often threatens life. It is found primarily in the tropics. The tendency of the parasite to invade erythrocytes of all ages greatly increases the parasitemia. Besides this the red blood cells agglutinate intravascularly and adhere to the capillary walls, interfering with the flow of blood. These emboli and thrombi may cause anoxemia and ischemia in any part of the body. Symptoms vary according to the organs involved.

Often the onset of falciparum malaria is insidious with headache, malaise, and gastro-intestinal symptoms. Because of the vagueness of the symptoms the disease often is misdiagnosed. At other times the onset is abrupt with a sudden rise in temperature which is maintained, resulting in a typhoid-like curve. Sometimes the temperature rises twice in 24 hours. When present this double daily rise in temperature is characteristic. Often the varied temperature curve is accompanied by great prostration, delirium, nausea, vomiting, and pain in the region of the spleen. Parasites are difficult to demonstrate. Repeated thick smears at intervals of 2 to 3 hours during the entire cycle may be necessary.

Falciparum malaria may assume any of several malignant or pernicious forms. In the severe types the onset often is sudden and may be rapidly fatal. This kind of malaria may simulate several conditions. The more common clinical types are:

1. Algid malaria, the dysenteric type, has a sudden onset of abdominal pain accompanied by diarrhea. The stool becomes watery and contains mucus and blood. Symptoms are similar to those of cholera. If malaria is not recognized and treated early there is rapid dehydration, prostration, coma, and death.

2. Billous remittent malaria is characterized by nausea, vomiting, bile-laden stools, and jaundice. Hemorrhage from the stomach is not uncommon. Dehydration is a prominent symptom. This form is the most common and least dangerous of the pernicious malarias.

3. Cerebral malaria may begin with headache followed by coma. The temperature may be slight or it may rise rapidly to 107° or 108° and terminate fatally with hyperpyrexia. Cerebral symptoms may take any form, coma, convulsions, delirium, mania, or other acute psychosis depending upon the part of the brain involved in the circulatory disturbance. The spinal fluid may be negative except for increased pressure. Cerebral malaria often is misdiagnosed as diabetic or uremic coma, meningitis, encephalitis, hemiplegia, heat stroke, or even acute alcoholism. In this very serious form of malaria, if treatment is not prompt and adequate, the mortality will be 50 per cent.

4. Typhoid malaria may begin with a single paroxysm, followed by a high temperature which is sustained for a period of days and falls by lysis. The temperature curve resembles that of typhoid fever.

5. Blackwater fever. When the hemolysis is rapid it is associated with hemoglobinemia and hemoglobinuria. The urine may be dark red or black. The onset is sudden with severe chill, fever, and prostrating sweat. When the urine is acid in reaction, acid hematin is deposited in the tubules of the kidney causing renal insufficiency or azotemia which is a common cause of death. Pallor and rapidly developing anemia are characteristic. Hemolysis may be continuous or may take the form of recurrent hemolytic crisis. One attack of blackwater fever seems to predispose to later attacks. Quinine is thought to have some relation to the etiology. Mortality is 25 to 50 per cent. The diagnosis is made on three findings, hemoglobinuria, fever, and jaundice. Parasites are difficult to demonstrate.

Treatment consists primarily in maintaining the fluid balance and keeping the urine alkaline. Anti-malarial drugs should not be given in the acute stage. Later atabrine can be given carefully. Transfusions are helpful if the anemia is severe.

Therapeutically induced malaria is used in the treatment of general paresis. This can be done by injecting infected blood or better by allowing the patient to be bitten by one or more infected mosquitoes. The patients are carefully watched and treatment instituted if symptoms become severe. Vivax malaria usually is used.

Diagnosis

In malaria an accurate species diagnosis is desirable. Therefore the diagnosis rests primarily upon the demonstration of the plasmodia within the erythrocytes. Usually this is done by examination of the peripheral blood by thick or thin smear preparations. Other findings in the blood which are of help are: leukopenia, increase in monocytes, presence of leukocytes containing malarial pigment, and an increased number of reticulocytes.

If the diagnosis can not be confirmed by these examinations the following steps can be taken:

1. Inject 0.5 to 1 cc. of 1 to 1000 adrenalin subcutaneously. This causes the spleen to contract and shunt cells into the peripheral blood. Five thick smears are made at 15-minute intervals after the injection. This procedure sometimes is called a splenic biopsy. At times it yields valuable information.

2. Sternal puncture with examination of the aspirated marrow by thin and thick smear technique is of value often, especially in falciparum malaria.

3. If the spleen is large and the diagnosis can not be established by other means a splenic puncture may be resorted to. This is dangerous and every precaution should be taken to prevent tears in the spleen.

Blood serology may be positive or negative.

Of course, the history of exposure or previous attack is invaluable as well as the periodicity, splenomegaly, and other signs and symptoms.

If after a careful search no parasites can be found the therapeutic test can be tried. Ten grains of quinine sulfate should stop the chills for several days. Also a reticulocyte crisis usually follows the giving of quinine.

Prognosis

Prognosis depends upon the type of malaria. Untreated falciparum malaria carries a 25 per cent mortality. In the other types of malaria the mortality is low, one death in 200 to 500 cases. Relapses are common especially in malariae which carries a 65 per cent relapse rate, while vivax has a 55 per cent relapse rate. Relapses are uncommon in properly treated cases of falciparum.

Relapse. Even after the patient leaves the endemic area malaria has a decided tendency to relapse. Some of the personnel of the armed forces returned from the Pacific and Mediterranean areas have suffered 30 to 40 and more relapses in spite of the most approved treatment.

Ordinarily relapses may be expected in falciparum malaria for 18 months after the first attack. In the vivax the period is 3½ years, in malariae 6 years. Some of the veterans continue to suffer relapses of vivax malaria even though the 3½ year period is passed. In general, as time goes on the attacks become less severe and further and further apart.

Relapses are precipitated by illness, surgery, accident, giving blood for transfusion, hemorrhage, change of climate, physical or mental exhaustion, and over indulgence in alcohol.

Pathology

The pathology of malaria is concerned chiefly with the destruction of erythrocytes. Parasitized red cells rupture when the plasmodiae reach the stage of the mature schizont. Unparasitized cells may be destroyed by hemolysins. Still other cells are lost by capillary hemorrhage, the walls of the capillaries having been acted upon by endotheliolysins. When hemolysis is rapid hemoglobinuria, or blackwater fever, is the result.

Intravascular agglutination of parasitized and unparasitized erythrocytes interferes mechanically with the blood supply in many organs. Regional blocking of the circulation causes ischemia, infarction, and sometimes necrosis.

In general, the reticulo-endothelial system is involved. The liver shows hyperplasia with toxic fatty changes. Enlargement of the spleen with infarcts and necrosis is characteristic. Generalized lymphadenopathy sometimes is seen. Hemorrhage and necrosis of the adrenal glands and necrosis of bone marrow are found. Slaty pigmentation is seen in spleen, liver, and brain. In falciparum malaria emboli occur in brain, heart, kidney, gastro-intestinal tract, and all other organs. Microscopically perivascular infiltration is accompanied by occlusion of the capillaries by agglutinated parasitized red blood cells.

In general, the blood picture in malaria is that of chronic blood loss, a hypochromic microcytic anemia. The reticulocyte count usually is elevated. If after treatment the reticulocyte count is sustained it is a sign of persistent malarial infection.

Destruction of erythrocytes causes an increase of the bilirubin in the blood and urobilin in the urine.

The white cell count is elevated during the paroxysm and depressed between attacks. Leuko-

penia of 2,000 is not unusual. In chronic malaria the monocytes are increased to 15 to 20 per cent. Hemazoin pigment is seen in the circulating leukocytes. This occurs in no other disease.

The albumin-globulin ratio is reversed and euglobulin is increased.

Repeated attacks give some immunity which is indicated by an increase in the monocytes. Boyd believes small doses of anti-malarial drugs may help in the development of immunity. Complement fixation anti-bodies may be demonstrated in chronic malaria.

Treatment

The aim of treatment is to sterilize the blood and tissues of malarial parasites.

The following drugs are used in the treatment of malaria.

1. Quinine. Four alkaloids are derived from cinchona bark: quinine, quinidine, cinchonine, and cinchonidine. Of the four, quinine ($C_{20}\ H_{24}\ N_2\ O_2 + 3\ H_2O$) is the most effective against malaria. The preparations most commonly used are the sulfate, bisulfate, and hydrochloride.

The Committee on Tropical Medicine reported: "Cinchona alkaloids are not effective in the prophylaxis of malaria. They do prevent symptoms and allow the troops to fight."

In the treatment of active malaria this committee recommends 20 to 30 gr. of quinine sulfate daily for seven days. The following scale is advised for children.

Under 1 year	2½ gr. daily
1 to 2 years	5 gr. daily
3 to 4 years	7½ gr. daily
5 to 6 years	10 gr. daily
7 to 8 years	12½ gr. daily
8 to 9 years	15 gr. daily
11 to 12 years	17½ gr. daily
13+ years	20 gr. daily

Quinine is a protoplasmic poison. In sufficient concentration it is lethal to all cells. Quinine is absorbed rapidly up to 70 per cent. The rest is excreted quickly. It does not accumulate in the body. Quinine is an antiseptic, a nervous stimulant, and a cardiac, respiratory, and circulatory depressant. In therapeutic doses it lowers the temperature, increases the leukocyte count, and arrests the migration of leukocytes. When the quinine blood level rises above 10 mg. per 100 cc. indications of poisoning are apt to occur. Toxic symptoms are ushered in by a rise in blood pressure followed by a rapid fall accompanied by circulatory collapse. There is cardiac depression and vasodilatation with headache, dizziness, ringing in the ears. In extreme cases there may be deafness, blindness, and destruction of red blood cells. Death usually is caused by respiratory failure.

2. Atabrine (quinacrine) is an acridine derivative which was introduced in 1933. Atabrine dihydrochloride is used in the treatment and prevention of malaria. This preparation is a yellow, bitter powder soluble in water at room temperature up to 3 per cent. In ultraviolet light it gives a greenish fluorescence in a dilution of one to five million. Atabrine is soluble in ether and amyl alcohol so it can be separated from water, urine, or plasma for quantitative determination by color or fluorescence. Atabrine is absorbed rapidly but not so quickly as quinine. Because atabrine is excreted slowly it accumulates in the body. It is stored in the liver and excreted in part through the bile. When the atabrine-laden bile reaches the intestine, part of it is reabsorbed and taken to the liver. So it goes round and round. Atabrine may continue to be excreted 69 days after therapy is discontinued. Atabrine is secreted in the milk and has been recovered in the urine of a suckling baby.

Under atabrine administration the skin, urine, and sweat may be stained yellow. This is not jaundice and the sclerae of the eyes remain clear. In a dark room in the presence of ultraviolet light the finger nails, teeth, and eyes of an individual taking atabrine will fluoresce. The urine and plasma also are fluorescent.

Toxic symptoms are rare and usually take the form of a gastro-intestinal upset. Psychosis may develop which may be a true atabrine psychosis or may represent the unmasking of a preexisting defect. Skin lesions and involvement of the eyes have been reported following atabrine therapy. Injected atabrine is 20 to 40 times as toxic as the oral administration.

Atabrine hydrochloride is a good suppressive in doses of 0.1 g. daily. Treatment should be begun two weeks before entering an endemic area and continue for one month after leaving the area.

Active treatment consists of the oral administration of 0.2 g. of atabrine hydrochloride with 1 g. of sodium bicarbonate with 200 to 300 cc. of water, fruit juice, or tea every six hours for five doses. This should be followed with 0.1 g. three times daily for six days. The temperature will drop in 2 to 3 days; schizonts vanish in 3 days; the gametocytes persist but disappear spontane-

ously within four weeks. Primarily this drug acts on the trophozoite and schizont stages of the parasite.

In blackwater fever atabrine is the drug of choice because it is well tolerated and is free of hemolytic action.

In pregnancy, too, atabrine is preferred for it has no effect on the uterus.

If vomiting is a serious symptom it will interfere with the oral administration of drugs. The usual means of allaying vomiting should be employed. No solid food should be given just before the chill is expected. Sips of alkaline water may help. Intravenous injection of 5 per cent glucose in saline will help to overcome dehydration and prevent acidosis. If, however, the patient cannot retain or fails to respond to orally administered drugs or is in coma it is necessary to give either atabrine or quinine parenterally.

Atabrine hydrochloride may be given intramuscularly using 0.2 g. in 5 cc. of distilled water. This amount may be injected into each buttock. It may be repeated in six hours if necessary. Oral administration should be begun as soon as possible. The total amount of atabrine for a single course of treatment is 2.8 g. in seven days.

Quinine dihydrochloride may be given intravenously in an emergency. The dose is 0.6 g. in 300 or 400 cc. of sterile distilled water given very slowly under close observation. This may be repeated once if necessary.

If intravenous preparations are not available 1 or 2 g. of quinine sulfate mixed with starch to form a thin paste may be given by rectum. This should not be repeated more than once because it irritates the mucosa.

3. Plasmoquin is a derivative of methylene blue. It has a powerful destructive action against gametocytes. The toxicity of this drug is so great that it should never be given to an ambulatory patient. There is a tendency to accumulation, so intervals between courses of treatment should be long. The toxic symptoms are cyanosis, sweating, abdominal pain, vertigo, and hemolytic anemia.

Plasmoquin is used when other less toxic antimalarials have failed and as a public health measure when gametocytes persist in the blood.

Plasmoquin may be given with quinine but should not be administered at the same time as atabrine. Treatment consists of 0.01 g. orally three times daily after meals for four days. One g. of sodium bicarbonate in 300 cc. of fluid are given with each dose of plasmoquin. Treatment should be discontinued if toxic symptoms such as nausea, abdominal pain, cyanosis, headache, pallor, dizziness, or hemoglobinuria ensue.

If the patient is small or debilitated the dosage of plasmoquin should be reduced.

4. Totaquin is a crude preparation of cinchona bark containing all four alkaloids. The dosage is the same as with quinine.

5. New anti-malarials. There is a long list of new anti-malarials which still are in the experimental stage. Some of them give great promise if their toxicity can be reduced.

Chloroquine diphosphate is available. It is said to suppress early attacks but not to prevent relapses.

Panaquine, pentaquine, and paludrine are quite toxic, and their use is not recommended at this time.

General and symptomatic treatment consists of bed rest, maintaining fluid balance, adequate salt intake, balanced diet with vitamin supplement, especially if there is vomiting. Hot water bags and blankets for chills, cool sponges for fever. The patient must be watched carefully for signs of collapse or drug toxicity. In convalescence ferrous iron may be needed to combat the anemia. The patient should be screened as a public health measure.

No matter what the treatment, there is no cure so long as the individual remains in the endemic area for he is constantly being reinfected.

It must be remembered that latent malaria is a constant public health problem in all areas inhabited by the anopheles mosquito.

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INTERNATIONAL SECTION

Hunger and Its Pathological Effects in Holland

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DURING THE COURSE of 1942 rationing in the Netherlands became so restricted that it was necessary to give extra food to people who were ill. The medical distribution service was in our own hands. For some months it had also been possible to increase the rations in cases of 25 per cent underweight; but very soon this became impossible as too many came under the category. Rations for younger children were sufficient until May, 1944. Children from eleven years of age, however, were showing a decrease in weight as early as 1941 and a perceptible decrease in height in 1943. It is very curious that the decrease was more pronounced in girls than in boys. Probably the boys had more ways to obtain or steal some extra food.

Whereas in Paris hunger osteopathy was seen as early as 1942, the first case of osteomalacia caused by food deficiency in Holland was described in March, 1943. Afterwards there were many cases of hunger osteopathy. Twenty-four of these have been included in a very fine monograph (not yet published) by Drs. Pompen, la Chapelle, Groen, and Merex.

The chief symptoms in hunger osteopathy are pain and stiffness of the back, the lower limbs, the feet, and now and again also of the arms and ribs. The patients move about in a curious, stiff way, and when rising out of a chair have to heave themselves up by their hands. Coughing and sneezing may be painful. In some cases, as the complaint was thought to be of rheumatic origin, gold therapy had been tried, but in vain. On x-ray investigation one finds translucent notches or bands of decreased opacity, so-called Looser zones, where the bone has been replaced by osteoid. They are located chiefly in regions of stress and strain. In some cases there are definite fractures with callus formation.

Hunger osteopathy is regarded by the above authors as "the result of a combined deficiency of multiple food factors, of which animal protein might be one, and of which vitamin D is probably the most important. If untreated, hunger osteopathy develops progressively into typical osteomalacia. Twenty-two of our cases occurred in women. We are inclined to ascribe this peculiar sex distribution to a difference in food habits between men and women, rather than to hormonal distinction between the sexes. Generalized osteoporosis is often present, but may be slight in early cases. All our cases improved with rest in bed, a full diet, especially rich in animal protein and calcium (milk), with extra vitamin D by mouth or by injection. The patients lost their pains within two weeks. X-ray examination demonstrated objective improvement within two months. It is our impression that vitamin D was the most important therapeutic agent. It made no difference whether the vitamin was given by mouth or by injcetion."

From 1944 children were seen with Barlow's disease, which had become unknown in Holland, and rickets was increasing rapidly. Pellagra was observed in psychiatric patients from 1941, and afterwards cases occurred in mental hospitals, though they were fewer than had been anticipated. There were, however, many cases of perniosis, which probably had some connection with nicotinic acid deficiency, and mouth and tongue sores, which undoubtedly had. The same can be said of beriberi. We did not see many definite cases, but there were an unusual number of patients with polyneuritis and there still are. From 1942 we all had polyuria, especially at night, quite frequently amounting to more than three litres a day. It must be considered as a latent edema.

Food poisoning by mushrooms and by beechnuts was seen from 1942. Up to 1943 there had been 223 cases of the latter. Beech-nut poisoning is characterized by intestinal troubles, severe headache, difficulty in breathing, a cloudy effect on the brain, and in some cases a lyssa-like condition: it can be avoided by removing the germ of the nuts. The illness passes in a few days and is never dangerous. Botulism brought about a state resembling myasthenia gravis.

Partly as a result of the coarseness of the food and partly owing to psychic strain, cases of ulcer of the stomach and of the duodenum increased. Stolte and Beaumont state that at the Onze Lievre Vrouwe Gasthuis at Amsterdam during the 44 months from January, 1936 to September, 1939, there were 392 ulcer cases in the wards, whereas during the 46 months from September, 1939, to July, 1943, there were 633. The number of ulcers of the lesser curvature was relatively higher than before the war and the perforations had increased considerably.

Treatment of diabetes mellitus became very difficult on account of the lack of insulin and of suitable food. All diabetics except the very severe cases had to do without insulin and had to be reduced to hunger diets. During the "hunger winter" these were symptom-free, though sugar-beets were their principal food. Afterwards they suffered severe relapses.

Lack of fuel during the very cold winters of 1941 to 1944 was the cause of a much higher incidence of rheumatic diseases and perhaps also of nephritis. The latter, however, was apparently contagious, like trench nephritis during the war of 1914-18. It was characterized by severe uremia and edema, with a blood pressure that was only moderately high. Blood pressure in general had a tendency to be lower than usual, probably because of undernourishment.

Record of Sickness

During 1943 there was a bad epidemic of poliomyelitis (Table I). Its contagiousness was clearly demonstrated in a home for children. Most of our bacteriologists now adhere to the theory of fecal infection. Lack of soap may have influenced this epidemic. We always have had some cases, mostly during the summer months; in Amsterdam they amounted to eight or nine a year. During 1943 in Amsterdam alone 635 cases were reported, and there probably were many more, as the abortive form with intestinal trouble, headache, and moderate temperature is not easily recognized and cannot be detected from the specific reactions in the spinal fluid; during an epidemic these reactions are positive in many who have not been manifestly ill. These persons must all have undergone infections and gained immunity as a consequence. In the course of one year the population may be said to be "durchseucht," as the Germans call it. To be sure, in the next year there were only 51 new cases.

TABLE I

Malaria, Poliomyelitis, and Diphtheria in Amsterdam

Year	*Malaria*	*Poliomyelitis*	*Diphtheria*
1935	..	..	132
1936	..	..	83
1937	..	..	66
1938	..	..	129
1939	..	..	50
1940	840	8	99
1941	300	8	163
1942	300	9	1347
1943	420	635	7687
1944	1360	51	7932
1945	920?	17	5588
1946-Sept.	1900	..	..

Already in 1941 the figures for diphtheria were showing a tendency to rise. In Amsterdam new cases were shown to belong to the intermedius and not to the local mitis strain. The next year brought a very bad epidemic, and this time it was caused by the gravis strain, which had been imported from Germany. From a mean figure of 100 cases a year in Amsterdam, we had nearly 8,000 cases in 1944, among which were many severe infections, with early death from toxemia, or paralysis even after many months. The infection, moreover, was made worse by the lack of serum and could not be controlled until after our liberation, when we were able to obtain the potent new British sera. During this epidemic many adults fell ill, even those who had had diphtheria before, as the former mitis infection gave no protection against this new strain. This epidemic, therefore, proved fatal to many adults as well as to children.

Bacillary dysentery (Table II) showed a peak in 1941 and another in 1944, the latter being caused again by a strain which was not met with in our country before the war and was proved to

TABLE II

Bacillary Dysentery in Amsterdam

Year	*Total No.*	*Sonne*	*Flexner*	*Newcastle*	*Unknown*
1940	338	278	60	..	..
1941	1802	1787	11	..	4
1942	1201	1186	11	..	4
1943	703	429	104	156	14
1944	1633	118	241	1052	219 (3)
1945	846?	26?	149?	157?	514?

TABLE III

Typhoid Fever in Amsterdam*

Year	*Total No.*	*Import*	*Contacts*	*Milk*	*Eel*	*Unknown*
1941	9	4	4	..	..	1
1942	34	15	13	..	..	6
1943	26	9	14	..	..	3
1944	142	9	2	..	123	8
1945	771	197	244	175	59	96

*From 1930 to 1940 typhoid fever averaged about 10 cases a year.

Cases in Holland

1939	172	1942	526
1940	108	1945 (approx.)	4800
1941	167		

have been imported from Germany—the Newcastle strain. An epidemic of typhoid fever (Table III) caused by eels which had not been sufficiently smoked occurred in 1944. In 1945 there was another infection, through handling of the milk in a big factory by a typhoid carrier. Before the war milk infections had quite disappeared in Amsterdam, as the control of milk was very strict indeed. At present we are suffering from malaria, which through lack of quinine and atabrine cannot be effectively controlled. Houses are being sprayed with DDT to kill the mosquitoes. Before the war syphilitic infections were becoming very rare. Now there is a dangerous increase of venereal diseases, partly due to the occupation and partly to the deportation of many thousands of our people. When they return they have to pass a pretty stiff examination, which has not been effective in all cases.

Tuberculosis is not notifiable in Holland. We have found that people come for examination and treatment much more readily if they know that their illness will not be talked about. Our figures for deaths from tuberculosis before the war were very low compared with other countries, amounting to 4.1 in 10,000 inhabitants during 1939. In 1943 already this had increased to 6.99, that is, 70.5 per cent more. Now, as a consequence of evacuations, deportations, and hunger, there is a considerable increase. I can give you some figures from the consultation bureau of Amsterdam. The mean figures for new cases in the age group 0-15 years are the same as before: for tuberculosis of the lungs 134 from 1933 to 1939, other forms 65; from 1940-1943, 137 and 54. In persons over 15 years of age, 505 for tuberculosis of the lungs and 161 for other forms from 1933-1939; 930 and 471 from 1940 to 1943. In the sanatoria the patients' weights began to diminish from the very start, long before the lack of food could have been of any consequence, as in 1940 there was no rationing for the sanatoria at all. Worry must have been the chief cause.

Of the students who were sent to Germany because of their refusal to sign a declaration of loyalty, many have returned with severe tuberculosis. Special sanatoria have been opened both in Holland and in Switzerland to provide them with intellectual surroundings during their cure and to enable them to carry on their studies as well as their health will allow. The "Swiss help" has been giving us great assistance in providing for these students, and for this we are immensely grateful.

The Food Situation

From the time of the occupation food had been getting scarcer. In 1941 we had between 1700 and 1800 calories a day; during 1942 and 1943 we had 1600-1700 calories, and during the summer of 1944 these rations had been reduced to 1428 calories, so we had been undernourished for a long time. The railway strike in 1944 made transport of food more difficult, but most of our food was transported by water, so it need not have made such a big difference. The Germans, however, starved us deliberately in order to break down this strike, and our growing resistance at the same time.

During the last quarter of 1944 we received 1021 calories, with 21 g. protein, of which 8 g. was animal protein; and during the first quarter of 1945 we had 618 calories, with 12 g. protein, of which 2 to 4 g. was animal protein. During the second quarter, thanks to the Swedish and Swiss gifts, we had 1396 calories, 28 g. protein (13 g. animal protein). No until the third quarter of 1945 did we get as much as 2036 calories, with 40 g. protein, of which 21 g. was animal protein. Only quite recently have our meat rations been increased.

During the first half of 1945 in Amsterdam alone there were 2,298 deaths from hunger (Table IV), in The Hague, 2122; the figures for Rotterdam I could not obtain, but they will have been something of the same order; for the increase of deaths as compared with the same period in 1944 amounted to 222 per cent for Amsterdam, 240 per cent for Rotterdam, and 213 per cent for The Hague. Deaths from hunger in these three towns alone amounted to something like 6,500; that is, more than six times the number given by Karl Eimer for the whole of Germany in 1917.

Infant Mortality

All through the war, rationing for children has been much better than for adults. Even so, the deaths of babies, which had been lower in the Netherlands than in other countries of Europe or in New York—amounting to 37 a year per 1000 living born during 1928-38—in June, 1945,

TABLE IV
Deaths from Hunger

Town	*Time*	*Total Deaths*	*Deaths from Hunger*
Amsterdam	Jan.-June, 1944	4284	
	Jan.-June, 1945	9324 (222%)	2298
Rotterdam	Jan.-June, 1944	3171	
	Jan.-June, 1945	7714 (240%)	?
The Hague	Jan.-June, 1944	3113	
	Jan.-June, 1945	6629 (213%)	2122
Utrecht	Jan.-June, 1944	1112	
	Jan.-June, 1945	2065 (186%)	100

In Rotterdam from January 1 to June 1, 1945, the following were the increases in deaths compared with same period of 1944:

Men	232%	Children up to 1 year	169%
Women	75%	Children from 1 to 5 years	125%

rose to 129 in Amsterdam as compared with 35 the year before. (Table V.) The Public Health Service took many thousands of babies by ship to Friesland, and some 80 who were too ill for transport were cared for in a little nursing home on the initiative of Dr. van Dok. Some of these children died, but many more were saved.

Hunger Edema

The official report of the percentage of people with hunger edema during the spring of 1945 has not yet been published. Most of the population were showing some slight degree of edema and all of us had nycturia. In many people the edema did not become manifest until the summer, when we had salt again. The edema still has a tendency to return, perhaps because our food is poor in protein. Though there is a predilection for the lower parts of the body, other parts may become involved through various causes, for instance, local infection or mechanical irritation. A very frequent location is the face. In edema formation the protein content of the blood plasma is not the only factor, for in some cases of edma the blood protein was not lowered at all. Prof. Formyne is of the opinion that hunger edema has some features in common with nephritic edema as regards distribution, the possible normality of blood proteins, and the lack of a rise in venous pressure.

TABLE V
Deaths of Babies from Weekly Epidemiological Record, September 6, 1945

	Mean 1928-38	Jan. '44	Feb. '44	Mar. '44	Apr. '44	May '44	June '44	July '44	Aug. '44	Sept. '44	Oct. '44	Nov. '44	Dec. '44	Jan. '45	Feb. '45	Mar. '45	Apr. '45	May '45	June '45
Netherlands (18 towns)	37																		
Amsterdam		41	39	42	53	57	35	23	17	37	28	55	55	75	89	120	98	90	129
Stockholm	42	23	27	20	25	25	30	29	25	21	22	17	20	23					
Copenhagen	47	37	36	50	55	45	30	43	35	34	37	46	42	41	54				
New York	51																		
Brussels	60	82	92	88	72	65	56	48	61	56	53	46	48	98	88	84	69	51	73
England and Wales (126 towns)	63	66	63	60	53	46	45	43	52	52	50	52	59	71	73	61	58	50	44
Germany (60 towns)	63	79	78	82	86	82	89	80	107	93	105								
Vienna	70	66	61	60	68	89	68	85	58	66	56								
Paris	88	62	70	91	78	75	51	41	42	46	46	57	69	112	113	85	84	80	84
Dublin	94	145	156	122	99	61	64	82	140	114	144	117	126	171	150	87	101	93	85
Athens	122																		
Bulgaria (97) towns	129																		

Photographs on these pages from "Hongeroste-opathie (osteomalacie) in Nederland" by Dr. A. W. M. Pompen, Dr. E. H. la Chapelle, Dr. J. Groen, and K. P. M. Merex. Amsterdam, 1946.

With regard to the last feature, however, Stolte has pointed out that the tissue pressure is very much lowered as a consequence of the loss of fat and part of the muscle tissue. There is a curious contrast between the dry leathery skin in some parts, which is loose and can be lifted up in bog folds, and the solid edema in other parts. Venous pressure cannot be high with such a low tissue pressure. In another respect there is a difference between the nephritic edema and hunger edema, as the latter is low in protein. Renal function was normal and there were no indications of cardiac insufficiency. Most people had a very pronounced bradycardia and lowered blood pressure. Damage to the capillary wall must be an important factor, as the Rumpel-Leede phenomenon was always present. Low tissue is another factor, and lowering of blood albumin plays a part in some cases.

Dr. Adelsberger from her experiences in German camps made a distinction between two types of starvation—a dry form and one with edema. We had the same experience in Holland, inasmuch as between February and May, 1945, people collapsed in the streets and died from starvation with very low body temperatures, showing little or no edema, and sometimes not seeming so very thin either, the latent edema having taken the place of the intertissue fat. During this cold winter body temperatures of 27° to 29° were not uncommon in these people and most of them died. It proved very difficult to raise these temperatures. After our liberation the number of patients with manifest edema increased considerably. Even with a very poor diet and rest they would sometimes lose their edema in a short time, showing a diuresis of 3 to 5 liters a day. All of these patients had anemia, sometimes in a macrocytic form, which was not cured either by iron or by liver. It was not the deficiency anemia of Lucy

Wills, but rather an aplastic form, the bone marrow showing very little activity. It responded to proper feeding very slowly, and then often changed into a hypochromic anemia, which reacted to iron.

Psychic factors were extreme lassitude and apathy, with considerable irritability. Sometimes anxiety states and psychosis were seen. Many elderly people took to their beds and died because they could not be bothered with the trouble of standing in queues to get a pint of thin soup. Others were frozen to death from lack of fuel. The Bureau of Churches has done much good work in seeking out and feeding these people.

Polyneuritis was and is still a common disease. In some rare instances there was a neuritis of the optic nerve with central blindness, weakness of the muscles, considerable muscle irritability, and a tendency to cramps, which persists in some. The calcium blood was lower in many instances. Chvostek's sign and Trousseau's phenomenon were only occasionally present.

Many people had intestinal troubles, which were aggravated by the diet of sugar beet and tulips. For some time we had half a loaf of bread and four kg. of potatoes for the whole week and nothing more, these rations amounting to 300 calories a day. Though people went far afield to get food, they often returned with little or nothing, and were weakened by days of walking or cycling.

People who collapsed, standing in queues or doing about the little work that was yet done, did not show orthostatic hypotension, but a low blood sugar. They swayed some time before actually falling down, sweated, and seemed completely dazed. In extreme cases of starvation, hunger disappeared and food was refused because of difficulties in swallowing.

In elderly persons death from cold was caused by lack of fuel, but at the same time there may have been a deficiency of the thyroid gland as a result of starvation, as in necropsy the gland was found to be small and leathery. Basal metabolism was lowered in most people from 20 to 30 per cent. Strange as it may seem, during a period of hunger, in cases of hypothermia some advocated the use of thyroid powder.

A curious feature was that some girls and young women got fat on a diet totally insufficient. This condition is probably a mixture of myxedema and hunger edema, but the edema is not demonstrated very easily. It is difficult to cure this condition with our present food supply. Even now there is a serious lack of protein and a relative abundance of carbohydrates. These patients are not benefited very much by thyroid powder. They complain of weakness and severe headaches, which sometimes are made worse by thyroid therapy. Treatment of starvation with or without edema has consisted of rest in bed and a diet of skimmed milk with glucose and vitamins. Very slowly the food intake has been raised. Kaolin, lactic acid, charcoal, and opium proved of value in the treatment of intestinal trouble. Intravenous therapy of casein preparations, amino acids, and blood or plasma transfusions did not prove of much value.

We have learned some things during this hunger period. Even those who did not develop edema, have experienced a curious change in their outlook and behavior, which varied from complacency and apathy to irritability. Formerly we may have scoffed at the poor for not being able to grasp the many opportunities which life offers to better their conditions. We never realized the fundamental significance of food. People who have been starved many times, like the Indians,

are apt to have an outlook on life and a standard of behavior different from those of more fortunate ones. There is today nothing perhaps of more importance than the effort to obtain food control for the whole world, and nothing more necessary than to improve upon it until it is possible to provide adequate food for all countries and for every man and woman and child of the community. Not until this is achieved will it be possible to assess the intellectual and moral qualities of the various races, or to expect their willing and active co-operation towards pacification and unification of the world.

❦ ❦ ❦

In the June issue of the JOURNAL, *which will be devoted to Industrial Health, there will be an article by Elizabeth Casson, M.D., D.P.M., of England, on "Occupational Therapy in Great Britain." Dr. Casson is Medical Director, Dorset House School of Occupational Therapy, Churchill Hospital, Oxford.*

MEDICAL WOMEN'S INTERNATIONAL ASSOCIATION

Fifth Congress, Amsterdam, Holland, June 24-30, 1947

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FIFTH CONGRESS, AMSTERDAM, JUNE 24-30, 1947

PLANS ARE progressing satisfactorily for the meeting of the Medical Women's International Association in Amsterdam. As of April 1, twenty-two of our members are making plans to attend, and several more are contemplating the trip.

The following members were elected at the San Francisco meeting as Councilors to represent our Association: Dr. Helen Johnston, Des Moines, Iowa; Dr. Esther P. Lovejoy, New York City; Dr. Elizabeth Mason-Hohl, Hollywood, California; Dr. Elizabeth Brakeley, Montclair, New Jersey; and Dr. Helen F. Schrack, Camden, New Jersey.

Dr. Catharine Macfarlane of Philadelphia is one of the Vice-Presidents of the Medical Women's International Association.

Delegates appointed to date are: Drs. Kate Zerfoss, Nashville, Tenn.; Ada Chree Reid, New York City; Mary Margaret Frazer, Detroit, Mich.; Nadina Kavinoky, Los Angeles, Calif.; Dorothy Atkinson, H. E. Thelander, San Francisco, Calif.; Edna Pennington, Nashville, Tenn.; Margaret Tenbrinck, Helen Heiman, New York City; Margaret Swigart, Monterey, Calif.; Mary H. Jennings, Los Angeles, Calif.; Helena T. Ratterman, Cincinnati, Ohio; Mabel Gardner, Middletown, Ohio; Olga McNeile, Los Angeles, Calif.; and Eva Brodkin, Newark, New Jersey.

The subject of the scientific discussion at the International meeting is, "The Responsibilities of Medical Women in the Reconstruction of the Post-War World: (a) As physician; (b) As social worker; (c) In international co-operation."

The five rapporteurs who have been chosen to discuss the subject are: Dr. Martha Eliot of Washington, D. C., for the United States; Dr. Macpherson (*Great Britain*) for Great Britain and the Dominions; Dr. Eriksson (*Finland*) for the Scandinavian Countries; and Prof. Ruys (*Holland*); and Dr. Roux-Berger (*France*) for other countries of Continental Europe.

The following questionnaire has been submitted in order to help these rapporteurs prepare their

report. If any of our members have any material or data on these subjects they should forward these immediately to Dr. Martha Eliot, Children's Bureau, United States Department of Labor, Washington. D. C.

Questionnaire

THE RESPONSIBILITIES OF MEDICAL WOMEN IN THE RECONSTRUCTION OF THE POST-WAR WORLD

(a) as Physicians.
(b) as Social Workers
(c) in International Work and International Co-operation.

Introduction:

General information concerning the destruction caused by the war in your country.

A—The effect on
- 1—Birth Rate
- 2—Death Rate
- 3—Infantile mortality rate
- 4—Morbidity

B—The effect of rationing food

C—Problems arising from the presence in your country of:
- 1—Displaced persons
- 2—Occupation troops
- 3—Prisoners of war
- 4—Persons returning from captivity or deportation.

D—Housing difficulties.

E—Increase in crime and juvenile delinquency and its causes.

THE RESPONSIBILITIES OF MEDICAL WOMEN IN THE RECONSTRUCTION OF THE POST-WAR WORLD

I—*As Physicians*
- A—Total population of your country?
- Number of male doctors?
- Number of women doctors?
- Number of women doctors as:
  - a. General Practitioners
  - b. Consultants and Specialists
  - c. Public Health Officers
  - d. Teachers in Medicine
- Any special points connected with their work.
- B—Is there in your country an Association of Medical Women and is it representative? Does it co-operate with other women's organizations?

II—*In Social Medicine.*
- A. Give a brief outline of social medicine in your country, including:
  - 1—Sickness and Accident benefit
  - 2—Care of the old and destitute
  - 3—Industrial welfare and Compensation
  - 4—Maternal care and Infant welfare
  - 5—Welfare of the school child
  - 6—Prevention of infectious diseases including tuberculosis and venereal disease.
- B. Is there co-operation in your country between the family doctor, the public health doctor and the industrial doctor?
- C. Do you consider it possible to maintain professional secrecy in a state medical service?
- D. Do you consider it possible to secure a good Health Service by education without compulsion?

III—*In International Work and International Co-operation.*
- A. Is it desirable that international co-operation in health matters should be intensified and how might this be done?
- B. Do you think U.N.E.S.C.O. and similar important organizations will influence health problems?

Letter from Dr. Henriette A. Lohr: "I have wonderful news: our Queen has granted us Her High Patronage both for our Association and for the Congress and so I expect she will send someone to represent her at the official opening on the 24th. You will be thinking us old-fashioned for being so glad of it, perhaps, but our Queen is very popular with us and her taking interest in our work is giving us faith in the success of it."

The medical women of Denmark, through their President, Dr. Agnete Braestrup, have extended an invitation to our members to visit Denmark preceding the Amsterdam meeting.

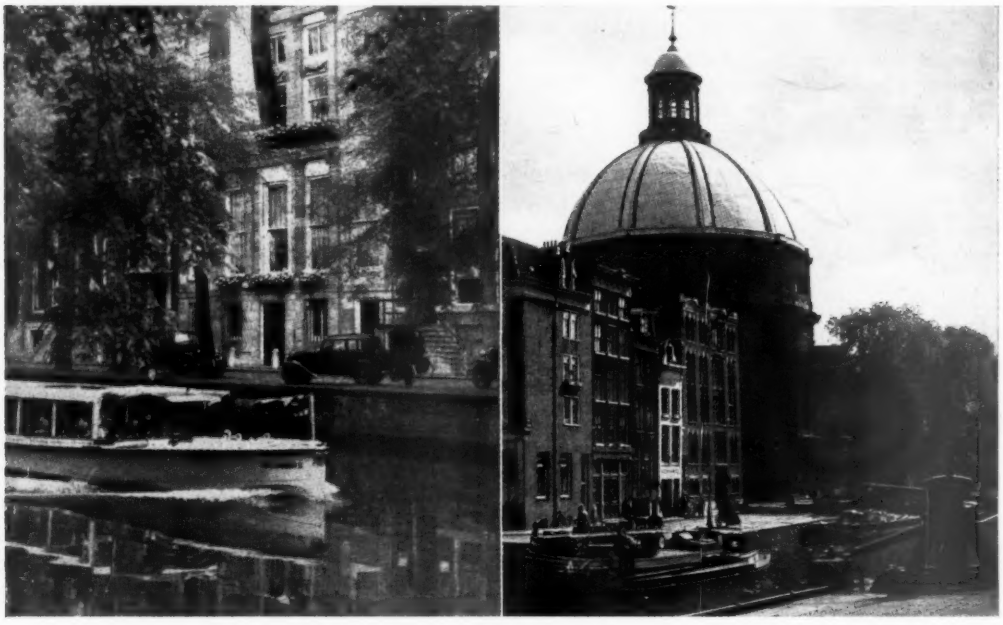
Dr. Montreuil-Straus has written that the medical women in Paris will be glad to arrange a visit in Paris for our members if they will notify her in advance of the time of their visit. Dr. Montreuil-Straus' address is 75, Rue de l'Assomption, Paris, 16. Some of our members are planning to visit Paris preceding the Amsterdam meeting and some following that meeting. We would advise you to obtain your hotel reservations for the time of your stay in Paris through your travel bureau in the United States before leaving.

Dr. Vlasta Klalova Di Lotti hopes that the American Delegates will visit Prague, Czechoslovakia, after the meeting in Amsterdam.

Dr. Mary Esslemont of 22 Waverley Place, Aberdeen, Scotland, has also written to say that the medical women there will be glad to see any of our members and will try to help with hotel accommodations if we will let her know in advance.

For those who wish to go by boat: the *Queen Elizabeth* sails from New York for Southampton (London) on June 11, and will be at Southampton in the afternoon of the 16. If the boat is not too late, you will reach London in time to get the 8 o'clock boat train to Harwich that night. At 10 o'clock the boat will be leaving for Holland, arriving at Hoek Van Holland at 7 in the morning. There is a boat train from Hoek Van Holland to Amsterdam at 8 o'clock and arriving there at 10 o'clock at the Central Station. This boat train is passing through Rotterdam.

If you want to visit Rotterdam, it is much easier to go by train, than to ask for the boat to take you there, as the sluizing would take an hour at least, whereas the train will take you in a quarter of an hour.



Scenes in Amsterdam. ***Left:*** **One of Amsterdam's many canals.** ***Right:*** **Singel with Lutheran Church.**

The Harwich boat has a daily service, Sundays excepted. The Congress-bureau at the Indian Institute at Amsterdam will be open on Monday the 23, from 9 to 5 and on Tuesday, Congress will be open in the afternoon.

Members staying in London previous to the meeting in Amsterdam are advised to leave London not later than Saturday night, June 21, (there is no Sunday boat) in order to get to Amsterdam in time for the Council Meeting on Tuesday morning, June 24. There will be daily plane service between these two cities.

From London to Copenhagen one may go by air—flying time about three hours. Scandinavian Airlines, 270 Park Ave., N. Y., can give all information and will reserve tickets one month in advance. By boat it takes 30 to 36 hours from London (Harwich) to Copenhagen via Esbjerg. Funch & Eddys Co., 25 Broadway, N. Y., can give all necessary information on this. This is rather too time-consuming, as one will not reach London until June 16 if one sails on the *Queen Elizabeth* from New York.

Transportation can be had from Copenhagen to Amsterdam either by air or by train. The train leaves Copenhagen at 23 o'clock — with sleeper — and arrives at Amsterdam at 20 o'clock the next evening. So it passes through Germany, — Hamburg — by day. The military permit to pass British occupied zone in Germany you can get in Copenhagen. The fare is 70 danish Kroner III class and 110 I class plus sleeper.

Transportation by plane can be obtained direct from New York to both Copenhagen and Amsterdam. There is daily train and plane service from Amsterdam to Paris.

Most of our delegates are planning to visit other countries before and after the Amsterdam meeting. Some plan to attend the Bicentennial meeting of the Rotunda Hospital in Dublin, Ireland, June 7 to 14.

Final details and instructions will be discussed at the Annual Meeting of the American Medical Women's Association in Atlantic City.

The Secretary has sent letters to all councilors and delegates so far selected, certifying that they are attending the meeting in Amsterdam in that designated capacity. She will be glad to supply any other information necessary to secure passports.

If you have not yet notified the President or Secretary that you are going to attend the International Meeting, please do so at once.

PRELIMINARY PROGRAM OF M.W.I.A. MEETING
(All general and scientific meetings will take place at the Indian Institute, Mauritskade 63, Amsterdam-O.)

Monday, June 23:

10 a.m.—5 p.m. Opening of the Reception Bureau (following days at 9 a.m.). Distribution of Congress-Papers, invitations, and tickets for excursions.

Tuesday, June 24:

9:30 a.m. Council-meeting at the Headquarters of the "Nederlandsche Maatschappij tot Bevordering der Geneeskunst," Keizersgracht 327, Amsterdam-C.

2:30 p.m. Official Opening-Session in the Aula of the Indian Institute. After the session: Tea, offered by the Netherlands' Medical Women's Association.

Wednesday, June 25:

9:30 a.m. General Meeting.

12:30—1:30 p.m. Lunch at the Indian Institute.

1:30 p.m. Scientific Meeting: "What are the responsibilities of Medical Women in the Reconstruction of the Post-War World, as Physicians, Social Workers, Internationalists?"

Evening: Reception or Dinner.

Thursday, June 26:

9:30 a.m. Continuation of Scientific Meeting.

12:30—1:30 p.m. Lunch at Indian Institute.

1:30 p.m. Continuation of Scientific Meeting.

Evening: Reception or Dinner.

Friday, June 27:

Excursion to Leyden and The Hague.

Saturday, June 28:

9:30 a.m. Council-Meeting, Keizersgracht 327, Amsterdam-C.

1:30 p.m. General Meeting and Closing Session.

Sunday, June 29:

Excursion to the National Park of the "Hooge Veluwe" and visit to the Museum of Modern Art.

Monday, June 30:

9:30 a.m. Council-Meeting, Keizersgracht 327, Amsterdam-C.

1:30 p.m. Council-Meeting, Keizersgracht 327, Amsterdam-C.

N.B. Visits to various institutions during the Congress are being planned, as well as trips in Amsterdam and to the surroundings. You will find all details in the definite program, which will be sent to you after your registration has been received.

HELEN F. SCHRACK, *M.D.*
National Corresponding Secretary, M.W.I.A.

Dr. Lohr of Amsterdam writes that the weather in Holland is usually fine in June, but she advises that visitors should bring along a raincoat and overshoes in case there is a rainy spell. "The air is fresh," she has written, "and there may be much wind—so a woolen coat and dress are indispensable. Light spring clothes alone will not suffice."

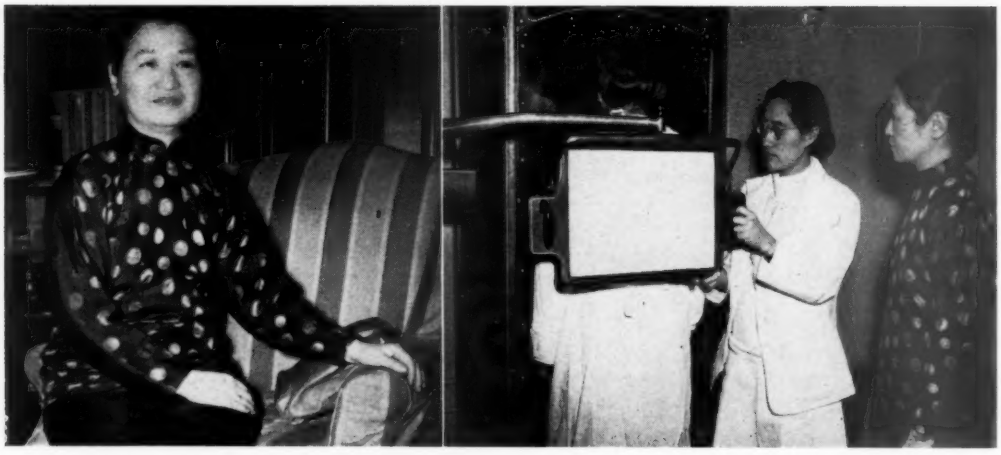
ANNOUNCEMENTS

The National Association for the Prevention of Tuberculosis calls a conference for July 8 in London. The Commonwealth and Empire Health and Tuberculosis Conference will meet in London, England, July 8-10. The provisional program for the conference, as announced by Dr. Williams, covers Tuberculosis in the Commonwealth, including silicosis; the National Health Service Act and its Effect on the Tuberculosis Scheme; Sanatorium Design at Home and Abroad; After-Care and Rehabilitation Schemes; The Human Factor, papers on propaganda, psychology, and education, and Specific Measures in the Prevention and Treatment of Tuberculosis, BCG, etc. Discussion of the National Health Service Act, scheduled for the afternoon of July 8, will be opened by British Minister of Health Aneurin Bevan who will describe the way in which tuberculosis work in England will be affected by the recently passed Act; and arrangements are being made for delegates to visit various institutions, including sanatoriums, clinics, and hospitals. Physicians may also attend the Conference of the Tuberculosis Association of Great Britain and Ireland in Edinburgh, Scotland on July 16, 17, and 18, 1947. Tavistock House, North Tavistock Square, London, W.C. 1, England.

Travel arrangements for those wishing to attend the Conference may be made through Thomas Cook and Sons, Berkeley Street, London, W.1.

* * *

The President and Council of the Federation of Medical Women of Canada cordially invite their colleagues in the United States to join with them at their annual meeting this June. They meet during the Canadian Medical Association Convention. There will be a Medical Women's Breakfast Gathering on June 25 at 8:30 a.m. at the Business and Professional Women's Club, 3 Evergreen Place, Winnipeg, Manitoba, Canada. At least two Canadian women are hoping to attend the Congress of the Medical Women's International Association in Amsterdam. They are Dr. Margaret Owens and Dr. Anna Wilson, both of Winnipeg.



Left: **Dr. Zok Tsung Wang, President and Professor of Gynecology of Women's Christian Medical College of Shanghai, China, visiting the New York Infirmary which has provided internships and residencies for many Chinese women doctors of Dr. Wang's Medical College.** *Right:* **Dr. Wang watching Dr. Frances Lee, resident of the New York Infirmary, preparing patient for fluoroscopy during routine Strang Clinic examination for cancer.**

SHANGHAI WOMAN DOCTOR VISITS NEW YORK INFIRMARY

DR. ZOK TSUNG WANG, President and Professor of Gynecology of the Women's Christian College of Shanghai, China, was a recent visitor at the New York Infirmary, which has provided several internships and residencies for Chinese women graduates of Dr. Wang's college.

Dr. Wang, here for the first time since the war, informed staff members of the Infirmary that the health crisis in China is desperate, and that it would take years to overcome the setbacks in medical progress there, due to the Japanese occupation, and to bring hospitals and clinics up to pre-war standards.

In present-day China, 50 per cent of the population in some sections die before they reach the age of 30. Disease and death rates have risen to an all-time high during and since the war; many of the advances made in the past 60 years in education have been erased making it necessary to do much of the work all over again. Tuberculosis is more prevalent than ever before because the population in the battle areas is living in squalid huts—most of which have earthern floors. Diseases due to unsanitary conditions and malnutrition are taking the heaviest toll in the history of China.

Dr. Wang also reported that China was, at last, becoming cancer conscious although there has been as much as an 80 per cent fatality rate for years. Dr. Katherine Li, a former resident of the New York Infirmary's Strang Clinic and in surgery, recently founded China's first cancer clinic in the Margaret Williamson Hospital of Shanghai, where she and Dr. Wang are on the staff. Dr. Li took back with her more than $30,000 in equipment, which was the gift of an American woman. Dr. Frances Lee is now a resident of the Strang Clinic and will establish another diagnosis and treatment center when she returns home. Dr. Yui, who was the first Oriental woman to receive the Mary Putnam Jacobi Fellowship and who trained in Strang Clinics at both the Infirmary and Memorial Hospital, is now working in the Methodist Union Hospital in Chungking.

But for every student who comes to this country, there are twenty who are not able to come because of the lack of training facilities and opportunities for them. Of their 250 graduates,

88 per cent are now serving in hospitals established by Christian Missions, many of which were greatly damaged during the war.

The Margaret Williamson Hospital, established in 1884 by Dr. Elizabeth Reifsnyder, had grown from a two-room native to a modern 270-bed hospital, and from two workers to a staff of 27 doctors when the war forced them to move from the Chinese city into the International Settlement in order to carry on their work outside the combat zone. This cut their capacity to 120 beds and meant that hundreds of war, famine, and disease victims had to be turned away. Demolished parts of the buildings, which number ten, with the college and school of nursing, are being repaired and expanded now, and the equipment, looted during the occupation, is being replaced as quickly as possible at a cost of more than $700,000. Prior to the war, the hospital averaged 4,000 in-patients, and 40,000 out-patients per year with a staff of seven American and 20 Chinese doctors working in the medical, surgical, gynecological, obstetrical, and children's clinics. A department of dentistry will be added as soon as it can be properly staffed.

New York's private and municipal hospitals provide one fifth of all Grade A internships and residencies available in America. These opportunities must be greatly increased if New York is to assume its rightful position as the medical center of the world. All of the New York hospitals are bending every effort to increase their present training facilities and create more internships and residencies. The New York Infirmary plans to have more than double the number of posts now available in their new building, which will then serve as an *international* medical center.

DOCTORS FROM CZECHOSLOVAKIA

Left: **Dr. DiLotti and her friend, Dr. Ludmila Brumlik, examining slides at the New York Infirmary with Czechoslovakian laboratory technician, Ann Hyvl (histology).** ***Right:*** **Dr. DiLotti, Dr. Brumlik, and Ann Hyvl at the Technicon machine at the New York Infirmary.**

THE STUDENTS of the Woman's Medical College of Pennsylvania had the privilege of having two round-table discussions with Drs. Kalalove-DiLotti and Prochaskova, two Czechoslovakian women physicians who served their country as members of the underground during the German occupation. Dr. DiLotti worked as a physician throughout the period of occupation of Czechoslovakia by the Germans, using what little equipment she had been able to hide from the Nazis. Her husband and children were killed by the retreating Germans on V-E day and she was taken to a concentration camp. She is returning to her country determined to re-establish medical institutions in Czechoslovakia where the Nazis systematically

destroyed or removed every book, every piece of medical equipment, and every bed not occupied by an infectious patient.

Dr. Prochaskova has been studying the treatment of poliomyelitis and tuberculosis in this country, for the incidence of these two diseases in her homeland during the occupation, particularly among children, was truly frightening. During the war there were four severe polio epidemics in a country in which the disease had previously been practically unknown. In answer to the unspoken appeal of these two unusual women, the AIMS Chapter of the W.M.C. is collecting journals, books, and equipment to be forwarded to Czechoslovakia. We all feel a desire to help these two new friends who are so sure that co-operative effort of governments and peoples will make it possible to re-establish the way of life and standard of living of which Czechoslovakia has been so justifiably proud.

Dr. DiLotti also visited the New York Infirmary and brought with her Dr. Ludmila Brumlik, also from Czechoslovakia. Both Dr. Brumlik and her husband are physicians, Dr. Ludmila is a gynecologist and her husband is a cardiologist, now at Bellevue Hospital. Dr. Brumlik tells us that all her equipment and instruments were taken in the German occupation—for its metal value. Her son, who was in medical school, was forced to work in a library replacing Czech literature with Nazi propaganda. He has now reentered medical school after losing four years during the occupation. Both Dr. DiLotti and Dr. Brumlik in commenting on their visit were extremely surprised at the small number of women physicians in the U. S. A.

INTERNATIONAL NEWS

A MESSAGE FROM NORWAY

The story of Televag, a fishing village on the coast of Norway where the American Women's Hospitals in co-operation with the Norwegian Medical Women's Association is installing a sanitary water system for the benefit of the housewives of that community, was told by Dr. Herdes Gundersen of Oslo at a meeting of Branch Two of the American Medical Women's Association and appeared in the Bulletin of that Branch, a publication which has been issued by Chicago medical women for many years. Her message was as follows:

"Dear Colleagues,

"It is a great pleasure to me today to have the opportunity to attend a branch meeting of the American Medical Women's Association and to meet you all.

"I have a greeting to you from the Norwegian Medical Women's Association and I also have to thank you for the gift you sent us to help in our country just after the war had ended. I think I must tell you a little how we felt when we heard of your donation.

"The Norwegian Medical Women's Association had in June, 1945, a big dinner to celebrate the liberation. That was a great event to us all, first because our country was free, and our own again, and second because it was the first public meeting we had had for several years; during the war the Germans did not allow any meetings so we had them secretly in our homes as private parties. In that way we could see each other, also do some help.

"We were all sitting at the table, many of us again joined after several years, some had been in prison, and others had had a very hard time, and now we were all very happy. So the president of our association rose and said she had a great surprise for us and she read the telegram from the American Women's Hospitals Committee of the American Medical Women's Association with the congratulations and the donation of a thousand dollars for help to our country.

"I should wish that you all could have heard with what acclamation the telegram was received and how grateful we all were for the friendship you showed to us in this way.

"At a later meeting we discussed what would be

the best way to use the donation as help was needed in so many places all over the country. But we decided it was best to give it to a small place where the population had been very patriotic during the war. In such a place the donation would not be forgotten or mingled up with others.

"The place we selected was Televag, a small fishing place on the west coast not far from Bergen. Here the population was very helpful with their small fishing boats. They helped hundreds of our countrymen to escape to England and finally were discovered as there were no fishing boats left in the small place where about 200 people lived. The Germans grew suspicious and through spies the whole affair was detected and the population was punished.

"They were all deported and not allowed to come back. Also all the children and women were taken to prison for some time, and all the men, about 70, were sent to concentration camps in Germany and a large number of them died there, mostly of tuberculosis. At Televag all the houses were burned down and everything was destroyed. Now it is going to be rebuilt, but as there is a great need for help all over the country and especially up north, we can't afford to give the population all the comfort we should wish to.

"People in these places are living very simply and it is rare to have a sink and running water inside the houses. The women generally have to carry water from the wells. So we determined that the best thing to do with your donation was to insure those brave and hardy women easier work in the future by having running water and sinks inside every house. We Norwegian women doctors have been glad and proud of joining you in your help, and we have now added to the sum and we are able to put in all the newly built houses in Televag running water and sinks.

"A woman doctor in Bergen will supervise the work and I will be happy to give you further information at any time you should wish in the future to know how everything is going on. At least I must say that in your donation you have made yourself a lasting memorial and we all appreciate heartily the help you have given us."

A similar report had been received by the American Women's Hospitals from the Norwegian Medical Women's Association with a copy of a poem by the distinguished Norwegian poet, Sigmund Skard. Mr. Skard was formerly a librarian and worked for the Royal Society of Sciences in Trondheim. With his wife and two sets of twins he fled from Norway across Siberia and came to the United States in 1940.

ENGLAND

A meeting of the London Association of the Medical Women's Federation was held at B.M.A. House on February 5 when Miss D. J. Collier, F.R.C.S. spoke on 'The Influence of War Experience on Everyday Ear and Throat Treatment."

NORWAY

An interesting study of patients with acute nephritis is being made by Dr. Ruth Ramberg of the Drammen City Hospital. She has undertaken a follow-up study of 175 patients treated in this hospital in the period 1935-1944. Ten of these patients died while still in hospital and four after discharge. It was found that 108 could be considered cured while 29 were not cured and 11 had suffered from relapse. It would seem that a considerable degree of proteinuria and definite edema are signs of bad omen. As high a proportion as 89 per cent in the "cured" group had undergone some acute infectious disease before the onset of signs of nephritis.—J.A.M.A., March 15, 1947.

* * *

The Women's Medical Association of New York City announces that Ingeborg Ilsaas Fehn, M.D., of Oslo, Norway, has been awarded the Mary Putnam Jacobi Fellowship for 1947-1948. Dr. Fehn is a graduate of Oslo University. She will work at Cornell University with Dr. Henricus J. Stander, studying obstetrics and, especially, types of anesthesia used during labor. In her letter of application, Dr. Fehn writes, "In Norway, they are very apprehensive regarding the administration of any type of anesthesia during labor."

FRANCE

"Dr. Helmer's work is so important and so well done that I don't like to think I've missed a chance to help in it. In all the homes I visited she was received with such affection that one could feel her interest and care for each individual, and she had a real grasp of the needs of the children, psychologically as well as physically. I feel it has been a privilege to know her and help even a little in what she is doing for the youth of France."

The above was written by Mrs. D. A. Lowrie, an American woman, the wife of the Foreign Secretary of the Y.M.C.A. at Paris. In addition to the American Women's Hospitals clinic, carried on for years at the Residence Sociale, Levallois-Perret, a committee was appointed in 1939 to co-operate with the French Medical Women's Association in emergency medical relief work due

to the war. Mrs. Lowrie is a member of this Committee and recently inspected the work carried on under the direction of Dr. Marie Helmer-Dupic for the A.W.H.

PALESTINE

A plan for the establishment of a cancer clinic in Palestine, along the lines of the Strang Cancer Clinics, is reported by Mrs. E. N. Mohl, vice-president of the Palestine Association of University Women and chairman of its Cancer Committee.

Mrs. Mohl states that, on her return to Palestine in 1944, following a trip to the States during which time she visited the Strang Clinics and studied the educational work of the New York City Cancer Committee, the Cancer Committee of the P. A. U. W. was reconstituted and now consists of a P. A. U. W. member from each of the three communities—Christian, Jewish, and Moslem—together with a representative of the Department of Health of the Palestine Government and a representative of the Hadassah Hospital. Through lectures by physicians in the three official languages—Arabic, English; and Hebrew—the importance of early diagnosis and proper treatment is being brought before groups of professional women, nurses, mid-wives, and social workers, as well as before small, intimate groups of women. The new clinic will be a part of the Hadassah Hospital in Jerusalem.

BUDAPEST, HUNGARY

Letter to Dr. L'Esperance from Dr. Vilma Sebesta. (Dr. Sebesta was awarded the Mary Putnam Jacobi Fellowship of the W.M.A. of New York City in 1937 and spent her year of study in Boston.—Ed.)

"It is with an uncertain feeling I am sending these lines to the Infirmary. As so very much has changed around me, I am tempted to think that also everywhere else changes must have taken place. You know for a long time we have been so much closed in, that even our thoughts did not move but in a small circle. Slowly our world is getting wider and wider again and I am thinking more and more about my year I spent in the U. S. A. in 1937-38 on the Jacobi Fellowship. It is one of the treasures which are safe, which no war or bombs can ruin. I wonder if you have had another European (fellow) or are you sending over here one of your young doctors? There are many things one can learn here, though hardly on the line of science. The Continent is too poor and unsettled yet. Still, at the same time, the interest in social hygiene and prevention is growing rapidly and there is as much done as possible. The social revolution which is taking place over here is propitious for this kind of work, and vice versa.

During the past silent years I have been in different jobs, working in the Institution for Public Health, at a station where we took ability tests of apprentices before choosing their profession—at a children's hospital. Since after our siege, 1945, I am a school doctor of the town. I am lucky to have two boarding schools for weak, anemic, and convalescent children, so-called free-air-schools, on one of our mountains or hills. So there is preventive and therapeutic work for me with not too much administration. As for science and research, I can't show up much, except my interest. There is private practice too and then so much else, as life became technically too primitive and difficult."

CUBA

The first Pan-American Congress of Social Medicine was held recently at Havana, Cuba. Eighteen women physicians presented papers and had scientific exhibits. They were: Dr. Cristina Alvarez, Dr. Adda Anderson, Dr. Gilda Peraza, Dr. Elena Moure, Dr. Elvira Rey, Dr. Gertrudis Aguilera, Dr. Esperanaza Costa, Dr. Josefina Acosta, Dr. Blanca C. Leon, all of Cuba; Dr. Maria Guadalupe Eguiluz, from Mexico; Dr. Eloise B. Cram, Dr. Lucy B. Reardon, Dr. Marian M. Brooke, Dr. Eleanor M. Johnson, from the United States; and Dr. Lya Imber, Dr. Auramarina Colmenares, Dr. Isabel Escalona, Dr. Maria Garcia, from Venezuela. • On December 3, at the celebration of Doctor's Day in Cuba, the Cuban Medical Association honored the memory of the first woman physician to be graduated from the University of Havana, Dr. Laura Carvajal, in 1890. • We have reason to believe that in the very near future, at least two women physicians will become part of the staff of the Spanish Hospitals known in Havana as "Centros Regionales" whose doors have until now been tightly closed against women physicians. • The medical women of Cuba are planning a medical association of their own.—Gilda Peraza, M.D.

GREECE

January 23 has been declared Festal Day of the graduates of the American Women's Hospitals School of Nursing in Greece. On that date twenty-four years ago the school was opened at the American Women's Hospital, Salonika, under the direction of Dr. Ruth A. Parmelee. It was afterward transferred to the American Women's Hospital at Kokkinia (Nikaia) in the

Festal Day, January 23, 1946, the twenty-fourth anniversary of the founding of the American Women's Hospitals Training School for Nurses in Greece. *Left:* Mrs. Tsaldaris, wife of the Prime Minister of Greece (since retired), being escorted through the gate of the Kokkinia Hospital by Mrs. Athanasia Theofilou, treasurer of the alumnae association of the American Women's Hospitals School of Nursing, with Greek Boy Scouts at attention. *Right:* Group of officials, doctors, and nurses in the court of Kokkinia Hospital. First row (left to right): Dr. Kostopoulos, chief physician of the A. W. H. Clinic; Chief of Police, City of Kokkinia; Dr. Brachos, A. W. H. physician; E. Albanis, Mayor of Kokkinia; Mme. Tsaldaris; Emile Willms, R.N., Mme. Harth; and Dr. Ruth Parmelee, member of the American Medical Women's Association.

Athens-Piraeus district where it was carried on for several years. At this hospital Dr. Parmelee was assisted by Miss Emily Willms and other American nurses and by Dr. Angenette Parry, past president of the American Medical Women's Association, who gracious presence (as a volunteer) and financial assistance are remembered with gratitude by the young doctors and nurses, most of whom were refugees (displaced persons) from Asia Minor.

The A.W.H. service, which was suspended in 1941 when Greece was occupied by the enemy, was by a fortunate coincidence, resumed at Kokkinia (Nikaia) on January 23, 1946. And to commemorate the opening of the school and the reopening of the A.W.H. work at Kokkinia (Nikaia) this date was adopted as Festal Day by A.W.H. nurses and celebrated by official ceremonies at the polyclinic at Kokkinia.

Those present on this occasion were Mme. Tsaldaris, wife of the Prime Minister of Greece, the Mayor of Kokkinia, members of Parliament, representatives of the Greek Orthodox Church, police captains, Dr. Ruth Parmelee, Miss Emilie Willms, R.N., Mme. Harth, Dr. Kalamaras, and the government officials and physicians interested in this service.

The translation of the speech of the Mayor of Kokkinia (Nikaia) published in the Greek newspapers reads as follows:

"Ladies and Gentlemen: I feel myself exceedingly happy because it happened under my mayoralty, to celebrate the anniversary of the foundation of this school and of the arrival in Greece of the American Women's Hospitals Committee during a critical period for our country and its people.

"It is known to all of us that twenty-five years ago the inhabitants of this town with other Greeks left their native country (Asia Minor) and abandoned their homes and plantations and took refuge to their mother country, Greece, where they found a refuge of safety. But Greece with her poor resources couldn't entirely help her miserable children.

"In that very moment the United States of America, an affectionate and friendly country, hurried to help us, sending on that purpose their select children.

"Besides the help that they offered to our citizens they founded on January 23, 1923, the American Women's Hospitals School of Nursing. The precious services and contributions of the American Women's Hospitals and its School of Nursing are well known and I would not relate about them longer.

"But I am obliged during this sacred moment to exalt the exceptional interest and the affectionate love shown to us by this noble committee, who with their excellent deeds showed us that they are genuine children of the great and affectionate country of America. . . . And now also, they have not forgotten Greece, and especially the inhabitants of this town and the War and Medical Service Committee of the American Medical Women's Association has accepted my

A. W. H. student nurses at Kokkinia Hospital in the 1930's.

personal request to help us, and in their last letter announced that the students of Los Angeles High School wish to enter into intellectual relations with the students of Nikaia's (Kokkinia's) High School and to help them by sending different useful things.

"The sending of condensed milk for the pupils is an expression of the affection that the American boys feel for the Greek boys who suffered so hardly during the war.

"Allow me to thank Doctor Parmelee and Miss Willms in the name of Nikaia's people, for their kind efforts and their moving interest.

"On finishing this speech, I consider as my supreme duty to thank during this celebration the select members of the beloved America, for all that they are doing in favor of Greece and especially in favor of Nikaia's people, and in the name of my citizens, I, the mayor of Nikaia, transmit our gratitude with the express assurance that the name of the United States of America will be uttered with love and veneration, and that we shall never forget all that they have done for us.

"And to you who have honored this celebration with your presence I express my infinite thanks."

Dr. K. Kostopoulos, who has served with the A.W.H. for years, gave a brief historical sketch of the service since 1922, and Mrs. Elenie Dourou (R.N., State of Pennsylvania), president of the Alumnae Association, A.W.H. School of Nursing, spoke of current activities. Photographs were taken by representatives of the Greek press, and after refreshments were served, the ceremonies closed with prayers and blessings by priests of the Greek Orthodox Church.

LOS ANGELES HIGH SCHOOL, CO-OPERATING WITH THE A. W. H. IN GREECE, "ADOPTS" KOKKINIA HIGH SCHOOL STUDENTS

Aen-Ling Chow (*center*), president, and members of the co-Girls' Division, Los Angeles High School, who gathered food, clothing, and school supplies to be shipped to the A. W. H. Clinic at Kokkinia (Nikaia), Greece, to be distributed among the high school students of that impoverished city.

"Don't slip up on Greece!" was the campaign cry of the Los Angeles High School students gathering food, clothing, and school supplies which have been shipped to the American Women's Hospitals Clinic at Kokkinia* (Nakaia), Greece, to be distributed among the high school students of that impoverished city. This project was sponsored by Miss Margaret Ray and the Girls' Advisory Council, and directed by the co-Girls' Division, Aen-Ling Chow, president.

The Mayor of Kokkinia is sponsor of a special committee appointed to co-operate with the student body of the Los Angeles High School which adopted the Kokkinia High School and proceeded in a practical way to establish friendly relations with the students. An exchange—cultural and material—has been arranged which should benefit both groups.

Kokkinia, the poorest large city in Greece, was the site of concentration camps while the country was occupied by the enemy during World War II. It has a population of about 80,000, most of whom are the descendants of Greeks who had lived in Asia Minor for hundreds of years. Dispossessed and expelled after the Greco-Turkish War which ended in 1922, these people took refuge in their mother country. That their cultural inheritance has been shared by the Western World is indicated in the fine editorials and historical articles on Greece which appeared in *Blue and White*, the daily publication of the Los Angeles High School.

Cultural contributions and exhibits are being prepared by the students of the Kokkinia High School, and if art thrives on privation something worthwhile should come out of the huts of that poor city built by refugees on the stony slopes of a Greek mountain overlooking Salamis and within view of the Acropolis.

*The American Women's Hospital was opened at Kokkinia in 1922 for the care of refugees, and a medical relief service was maintained in that poor city for many years. In this connection a polyclinic was conducted and a training school for nurses carried on. Some of the graduates were sent to the United States for special work. When Greece was invaded in 1941 the A.W.H. service was suspended, but after the country was liberated the Polyclinic was reopened and the visiting nurse service was resumed under the direction of the Alumnae Association of the American Women's Hospitals School of Nursing.

ORGANIZATION

Official Reports and Announcements of the Association

PRESIDENT'S MESSAGE

To those of you who have been receiving complimentary copies of the Journal of the American Medical Women's Association we extend an invitation to join our Association. We are expanding our program and hope to have the support of all women physicians. Membership in the American Medical Women's Association carries with it subscription to this Journal, the official organ of the Association, and membership in the Medical Women's International Association.

Won't you fill out now the membership blank which follows so we may be able to report your membership at our Annual Meeting in June?

Helen Johnston

ANNUAL MEETING OF THE ASSOCIATION

The Annual Meeting of the American Medical Women's Association will be held at the Hotel Claridge, Atlantic City, N. J., on June 7 and 8.

There will be important business to transact and we hope that members will make every effort to attend the meetings on these two days.

The Executive Committee will meet at 10 a.m. and the Board of Directors at 2 p.m. on June 6. In addition to routine business, the following matters are on the agenda for the meeting:

Revision of Constitution & By-Laws

Increase of Annual Dues

Progress Report of Alice Stone Woolley Me-.norial Committee

Progress Report of Elizabeth Blackwell Stamp Committee

Invitation to Medical Women's International Association to hold 1950 Congress in Philadelphia.

These are important matters to come before the meeting, in addition to the usual business routine and the reports of all Standing Committees. Please give every item your serious consideration.

We hope that every member present will take an active part in the meeting. If you wish to present a motion for consideration, put it in good form and in writing now. Such procedure will save time and misunderstanding later and will help the meeting to run more smoothly.

In accordance with the Constitution, all motions relating to New Business must be submitted in writing to the Resolutions Committee, or must be printed in the Journal previous to the Annual Meeting. Therefore, all such motions, not previously printed in the Journal, must be in the hands of the Secretary, Dr. Schrack, no later than May 15. Please note that all Chairmen of Committees, Regional Directors, and Branch Officers must send their reports for the year, in triplicate, to the Secretary at least *three weeks previous* to the Annual Meeting.

Will the officers of each Branch note that your

Branch is entitled to a delegate to the Annual Meeting at Atlantic City. The delegate must present her credentials at the time of the meeting and her name should be forwarded to the Secretary by June 1.

The number of votes each Branch is entitled to is determined by the number of paid-up members as of June 1.

The Registration Desk will be open throughout the American Medical Women's Association and the American Medical Association meetings and we wish that every medical woman, regardless of membership in the American Medical Women's Association, would register.

The program for the meeting is as follows:

FRIDAY—JUNE 6

10:00 A.M.—Executive Committee Meeting
2:00 P.M.—Board of Directors Meeting

SATURDAY—JUNE 7

9:00 A.M.—Registration
9:30 A.M.—Opening of Annual Business Meeting
12:30 P.M.—Luncheon
(In Honor of Past Presidents)
2:00 P.M.—Business Meeting
7:00 P.M.—Banquet—Speaker: Judge Dorothy Kenyon, New York

SUNDAY—JUNE 8

9:30 A.M.—Business Meeting
12:30 P.M.—Luncheon
(Speaker to be Announced)
2:00 P.M.—Business Meeting
5:00 P.M.—Cocktail Party
(Sponsored by Mead, Johnson & Co.)
7:00 A.M.—Inaugural Banquet—Speaker: Dr. Beulah Cushman, Chicago.

There are no further room reservations available at the Hotel Claridge. It will be necessary for those who have not already made reservations to fill out the Registration Blank found in the AMERICAN MEDICAL ASSOCIATION JOURNAL and forward it to the Housing Bureau, 16 Central Pier, Atlantic City, N. J.

AN INVITATION

We are very anxious to have any members of the American Medical Women's Association and other women physicians visit the Woman's Medical College of Pennsylvania on their way to or from the Atlantic City meeting.

Our Commencement is to be on Friday, June 6, at Irvine Auditorium, 34th and Spruce Streets, and I would be delighted to have them attend if any of them are here that early.

—MARION FAY, M.D., *Dean*

BLACKWELL CENTENNIAL

The seventh of November, 1947, marks a century since Elizabeth Blackwell was admitted to the Medical School of Geneva, New York.

The Library Committee plans to inaugurate and support a Blackwell Centennial to commemorate this event. Extensive plans are underway to publicize the importance of this turning point in the life of our pioneer woman physician. With her admittance to an accredited medical school a new era for women began, not only in the field of medicine, but by its reflex influence, in all other departments of education opportunities were extended.

We expect to be assisted by sponsors from all national organizations that are devoted to women's interests.

Committees are being created to care for the publicity desired in the press, radio, movies, and women's organizations. During the week of the Centennial opportunities will be given to honor this great woman by contributions to the Memorial Library.

Letters are being prepared for wide distribution to this effect.

—MABEL E. GARDNER, M.D.

COMMITTEE REPORTS

Organization and Membership

For sometime it has seemed that a Vice-Chairman or more than one Vice-Chairman would add greatly to the efficiency of this Committee. After consideration of the regions and the enormous territory they cover, it was finally decided that three would be sufficient. Many Regional Directors find it difficult in covering a large territory to find State Representatives. The opportunity to consult with a Vice-Chairman would many times be very valuable.

When each State Representative is appointed, she should consult with her Regional Chairman and if need be with her Vice-Chairman, and plan a membership campaign for her State. This campaign does not need to be spectacular. It may be as simple as the methods used by the medical women in New York City. They send out a postal card to all women physicians, asking if they are interested in joining with other medical women in the A. M. W. A. In this way they screen out very rapidly the women who are not interested at all and have no intention of being part of the national organization. Other methods

may be successful in States where there are few women physicians. Personal letters from the State Representative may be desirable.

At the present time only one of the Vice-Chairmen has been appointed. She is Dr. Nelle Noble from Des Moines, Iowa, Vice-Chairman over the Central regions. These regions include the Northwest Central Region, Dr. Jean Jongewaard, Director; Northeast Central Region, Dr. Faith Reed, Director; Southwest Central Region, Dr. Cora Dyke, Director; Southeast Central Region, Dr. Ruth Aleman, Director. I hope that the Directors of these regions will consult Dr. Noble about their problems. She is a Past President and has had experience in Membership and Organization work.

Since last month I have had a visit with a Regional Director and letters from two Directors. Dr. Ruth Aleman, Director of the Southeast Central Region, attended the meeting of the American Academy of Pediatrics, held in Pittsburgh, February 24 to 27. Dr. Aleman and Dr. Margaret Nicholson, Chairman of the Legislation Committee of the A. M. W. A., shared a room. They invited some of the other women physicians in to meet your Chairman. They were all busy with meetings and there was not much time but it was delightful to meet women physicians from Maine to California. Some of the women expressed a desire to take an active part in the A.M.W.A.

A letter from Dr. Jongewaard, Director of the Northwest Central Region, told us of illness in her family; however, she is anxious to get into active work just as soon as possible.

Dr. Mabel Akin's secretary wrote and said that due to illness of her husband, Dr. Akin would be unable to do any work in the Northwest Region this winter. They are in Palm Springs at the present time. Dr. Akin is also a Past-President of A.M.W.A. and I am sure many friends will join me in sending best wishes to both of them.

—Zoe A. Johnston, M.D., *Chairman*

NEW ACTIVE MEMBERS

CALIFORNIA

Alcenith V. Crawford, M.D.—327 Wilshire Blvd., Santa Monica. M.D., Louisiana State University, 1941. Member AMA and County Medical. **Specialty:** Eye, Ear, Nose, and Throat. Endorsers: Drs. Gertrude C. Seabolt and Dorothy V. Clark.

Janina S. Lauterbach, M.D.—6381 Hollywood Blvd., Hollywood. M.D., New York Medical College, 1944. Member of AMA and County Medical. **Specialty:** Pediatrics. Endorsers: Drs. Etta Gray and Gertrude C. Seabolt.

Rae Cason Lindsay, M.D—1708 Chatsworth Blvd., San Diego. M.D., College of Medical Evangelists,

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AMERICAN MEDICAL WOMEN'S ASSOCIATION, INC.

APPLICATION FOR MEMBERSHIP

☐ Active. $3.00 ☐ Associate. No dues ☐ Life. $50. ($25 in two payments)

(Active, associate, and life members receive the official publication. Active and life members receive membership in Medical Women's International Association.)

Dr. .....

(Please print name as you wish it to appear in Year Book)

Address .....

.....

Medical School ..... Year of Graduation .....

Other Degrees .....

Licensed in County ..... State .....

Member County Society ☐ Yes ☐ No ..... Fellow A. M. A. ☐ Yes ☐ No .....

Specialty ..... Specialty Board ☐ Yes ☐ No .....

Place of birth—City ..... State ..... Single; Married; Widow .....

Date of Application ..... Signature .....

Endorsed by 1 ..... M.D., Member AMWA

2 ..... M.D., Member AMWA

Note: Make check payable to American Medical Women's Association, Inc.

Mail this blank and check to Treasurer, MARY RIGGS NOBLE, M.D., Bowmansdale, Pennsylvania

1944. Member of AMA. Endorsers: Anne B. Geiger and Antoinette LeMarquis.

Camille C. Morgan, M.D.—3969½ Alabona, San Diego. M.D., University of Oklahoma, 1943. Member of County and State Medical. Endorsers: Drs. Eva Gaede and Berenice Stone.

Margaret Ann Storkan, M.D.—1016 Gardena Blvd., Gardena. M.D., Creighton University, 1944. Member of AMA and County Medical. Endorsers: Drs. Gertrude C. Seabolt and Elizabeth Mason Hohl.

FLORIDA

Bessie S. French, M.D.—305 N. W. 12th Ave., Miami. M.D., University of Illinois, 1913. Member of AMA and County Medical. **Specialty:** Anesthesia. Endorsers: Drs. Amey Chappell and Ella M. A. Enlows.

Rose Perrone London, M.D.—1065 Dade Blvd., Miami Beach, Fla. M.D., New York University, 1941. Member of County Medical. **Specialty:** Internal Medicine. Endorsers: Drs. Amey Chappell and Ella M. A. Enlows.

Harriet Nora Rogers, M.D.—College Infirmary, Florida State College for Women, Tallahassee, Florida. M.D., University of Texas, 1939. Member AMA and County Medical. **Specialty:** Pediatrics. Endorsers: Drs. Amey Chappell and Helen F. Schrack.

GEORGIA

Effie L. Lobdell, M.D.—Route 4, Box 52, Putney. M.D., University of Indiana, 1891. Member AMA and County Medical; F.A.C.S. **Specialty:** Gynecology. Endorsers: Drs. Lucille Snow and Carroll L. Birch.

ILLINOIS

Eslie Hartman, M.D.—1150 N. State St., Chicago 10. M.D., New York University, 1942. Member of AMA, County and State Medical. **Specialty:** Internal Medicine. Endorsers: Drs. Carroll L. Birch and Ethel M. Davis.

NEW JERSEY

Ruth V. Berney, M.D.—16 Lyons, Ave., Newark. M.D., University of Western Ontario, 1939. Member of AMA, County Medical, and Academy of Medicine of No. N. J. Endorsers: Drs. Mildred G. Gregory and Elizabeth R. Brackett.

Ruth B. Ferriss, M.D.—8 Wetmore Ave., Morristown. M.D., Cornell University, 1929. Member of AMA and County Medical. Endorsers: Drs. Mildred G. Gregory and Grace T. Newman.

Mildred Luca, M.D.—563 Westwood Ave., Long Branch. M.D., New York University, 1934. Member of AMA and County Medical. Endorsers: Drs. Helen F. Upham and Edith L. Brown.

NEW YORK

Marcelle Thomasine Bernard, M.D.—3650 Bronx Blvd., New York 67. M.D., New York Medical College, 1944. Endorsed by Dr. Theresa Scanlan.

NORTH CAROLINA

Catherine C. Carr, M.D.—10 Greenwood Road, Biltmore Forrest, Biltmore. M.D., Johns Hopkins, 1919. Member of County Medical. **Specialty:** Public Health. Endorsers: Drs. Amey Chappell and Irma Henderson Smathers.

Emma Sloop Fink, M.D.—Crossnore. M.D., Vanderbilt University, 1936. Member of AMA and County Medical. General Practice. Endorsers: Drs. Amey Chappell and Irma Henderson Smathers.

Margery J. Lord, M.D.—129 St. Dunstans Road, Asheville. M.D., University of Michigan, 1916. Member AMA, County Medical, American Public Health Assn., and American School Health Assn. **Specialty:** Public Health. Endorsers: Drs. Amey Chappell and Irma Henderson Smathers.

Mary B. H. Michal, M.D.—Waynesville. M.D., Yale, 1928. Member of AMA, County and State Medical, and N. C. Public Health Assn. **Specialty:** Public Health. Endorsers: Drs. Louise M. Ingersoll and Ethel M. Brownsberger.

Mary F. Shuford, M.D.—50 Orange St., Asheville. M.D., University of Chicago, 1934. Member AMA and County Medical. **Specialty:** Internal Medicine. Endorsers: Drs. Amey Chappell and Irma Henderson Smathers.

Mary Martin Sloop, M.D.—Crossnore. M.D., Woman's Medical College of Pennsylvania, 1906. Endorsers: Drs. Louise M. Ingersoll and Ethel M. Brownsberger.

OHIO

L. W. Starr-Boocks, M.D.—168 E. Main St., Logan. M.D., University of Cincinnati, 1928. Member of AMA, County, and State Medical. **Specialty:** Obstetrics. Endorsers: Drs. Louise Rauch and Helena T. Ratterman.

PENNSYLVANIA

Katherine Clark Bartlett, M.D.—1639 South 22nd St., Philadelphia 45. M.D., University of Pennsylvania, 1934. Member of AMA and County Medical. Endorsers: Drs. Freida Bauman and Miriam Butler.

Dorothea Maria Killian, M.D.—1930 Chestnut St., Philadelphia 3. M.D., University of Pennsylvania, 1935. Member AMA, County Medical, Physician's Motor Club, University of Pennsylvania Public Health Society. **Specialty:** Internal Medicine. Endorsers: Drs. Freida Bauman and Miriam Butler.

Jeanette S. McConnell, M.D.—1930 Chestnut St., Philadelphia 3. M.D., University of Pennsylvania, 1942. Member AMA and County Medical. **Specialty:** Internal Medicine and Endocrinology. Endorsed by Dr. Freida Bauman and Miriam Butler.

NEW ASSOCIATE MEMBERS

CALIFORNIA

Else Cabos, M.D.—145 Guerrero St., San Francisco 3. M.D., Amsterdam, Holland. Interned at Mary's Help Hospital, San Francisco, 1946. Endorsed by Dr. Helen B. Weyranch.

NEW YORK

Margaret M. Rice—11 Cooper St., New York 34. Will receive M.D., June, 1947, from New York Medical College. Endorsed by Drs. Mary A. Jennings and Frances H. Bogato.

* * *

Library Committee

The work of this Committee was begun immediately after the annual general meeting of the American Medical Women's Association, Inc., held in June, 1946, in San Francisco. At this meeting the motion that had been passed by the Board at its mid-year meeting in New Orleans, authorizing a committee to raise funds for building a library and memorial hall, was ratified without dissent. Dr. Zerfoss, then President, named the Committee and since her retirement the same Committee has continued to act through reappointment by Dr. Johnston, our present President.

The first act of this Committee was to prepare

campaign literature. In spite of the difficulties in reaching suitable sponsors in midsummer, and the delays in securing available printers, by the middle of September we were ready with a supply of 10,000 folders and pledge cards. Distribution of this campaign literature was accomplished through the kindly offices of our Regional Directors and Executives of the various Branches.

By the end of October we began to receive checks and up to March 20, 1947, Dr. Carroll Birch, Treasurer of the Committee, received donations totaling $6,002 from 182 individuals. Of these donors there were 104 lay persons and 78 medical women.

One of the lay donors gave $2,000. The total from lay donors was $3,407.

One of the medical donors gave $1,000; one, $150; five, $100, each; three, $50, each; seven, $25, each; one, $20; sixty, $10, each; and three gave less than $5, each. The total received from medical women was $2,595.

With their campaign literature the Committee sent out an appeal to each one of the association members to try and raise at least $100 for the Blackwell Auditorium, and it especially stressed that it preferred gifts of money from their friends, relatives, and patients rather than a personal check for that or any amount. For this reason the Committee was disappointed, not only because less than eight per cent of the association membership responded in any way, but because three-fourths of those who did respond sent a personal check for $10.

As Chairman of the campaign I put the blame on the Committee. We had not been forceful enough in presenting our appeal and were not familiar enough with the principles of raising money. It was determined to run down some of the causes.

My first surmise was that many women doctors objected to asking friends, relatives, and patients for a donation of any kind and I was not quite sure myself whether or not such persons would react favorably. As a test case, in November, 1946, I sent letters with campaign literature to a large group of my friends, relatives, and patients, utterly disregarding their financial status, and asked for contributions — anything from $1,000 to a three-cent stamp. To my relief and delight they responded with checks varying from $150 to $1. With the checks came letters expressing their gratitude for the opportunity to contribute to such a worthwhile cause. Up to March 1, 1947, Dr. Birch has received almost $1,500 from my begging letters. Of this amount $400 was given for Campaign expenses—enough to pay for all of our folders and pledge cards—in fact all of our expenses to date. This $400 is not included in $6,002 that Dr. Birch has sent to the Treasurer of the Woman's Medical College, our custodian.

Soon after I had sent out this appeal to my large lay group I received from Dr. Elizabeth Comstock, Arcadia, Wisconsin, a letter in which she stated that although she had pledged for the coming year $1,000 to the Woman's Medical College of Pennsylvania, she would take upon herself the raising of $1,000 for the Library Memorial Fund. She asked for Campaign literature and is doing a wonderfully successful job of campaigning. Two other members of the association have been successful in raising their quota from the lay public instead of sending their personal checks.

Even though our committee can report nothing more than a slow beginning, it is sanguine that with more meetings, more letters, more articles in our official organ, that giant, the power of medical women to make good, will bestir itself.

The surest and easiest way to honor Elizabeth Blackwell and to spread her fame is to ask as many people as possible to contribute to this memorial for her and our pioneers. It would shed greater glory and bring a quicker recognition of medical women for 100,000 people to give $1, each, than for 10 people to give $10,000 each.

Our Committee is confident that after 1,000 medical women have raised $100,000, the remaining $400,000 will come quickly. This exhibition of the whole-heartedness of medical women in this project will go a long way in making a successful appeal to any of the foundations, any of the national associations of women's clubs, any of the more than 500 multimillionaire women and men in our country, or any of the male physicians who are often more ready to advance medical women than medical women are to promote each other.

Between that day, now a century ago, when Elizabeth Blackwell opened the doors of one medical school long enough to receive an M.D. degree, and today, when hundreds of young women are applying for admission into one or another of the 75 medical schools now open to women students, a centennium of experiences has come to women in medicine.

Only three years remain in which medical women can properly prepare for this Centennial,

the greatest celebration that has ever come or that ever will come to them. Let us seize the opportunity and be grateful that we, who are living, can help give to the world, in memorial form, historical recognition of the women who opened careers not only for medical women, but for those in all other fields. Up to 1850 the only careers for women were teaching, sewing, and housework. Now is the time for us to pay our indebtedness and to acknowledge in permanent memorials our pioneer benefactors.

—Bertha Van Hoosen, M.D., *Chairman*

REPORTS FROM THE BRANCHES

One, Washington, D.C.

The Women's Medical Society of the District of Columbia held its regular monthly meeting in the Auditorium of the Medical Society of the District of Columbia, 1718 M Street, N. W., Washington, D. C., April 1. Dr. Catharine Macfarlane, research professor of gynecology at the Woman's Medical College of Philadelphia, who is also president of the Board of Directors, Philadelphia Division, American Cancer Society, and who has been active in cancer research and in establishing cancer prevention clinics, was the speaker of the evening. Her subject was "The Problem of Cancer Control." There was also an exhibit under the sponsorship of the National Cancer Institute. — Cecile L. Fusfeld, M.D., *Secretary, Women's Medical Society of D. C.*

* * *

Two, Chicago, Illinois

No March meeting of Branch No. 2, A.M.W.A., was held because of the Third Clinical Conference arranged by the Chicago Medical Society and its branches, which was held on March 4-7 at the Palmer House with a fine attendance. All who attended are to be congratulated on being able to participate in such a splendid condensed postgraduate course. Special congratulations are extended to Dr. Carroll Birch for her outstanding exhibit on hematology from the medical department of the College of Medicine, University of Illinois.

The next meeting of Branch No. 2 was held on April 9 at the Sarah Hackett Stevenson Memorial, 1400 W. Monroe St.

The following members have been appointed to the Joint Professional Committee:

Doctors Marguerite Oliver, M. Elizabeth Downing, Mary Jane Fowler, Helen Heinen, Clementine Frankowski, Helena J. Hutman, Louise Tavs, Victoire D. Lespinasse, Bertha Isaacs, Dorothy Haasch-Chess, and Natalie Stephens.

The first meeting was held on Monday, February 17. The subject for discussion was "Problems of The Woman's Court," presented by Miss Katherine Nohelty, Public Defender, Municipal Court, assigned to Woman's Court; and Catherine McCorry, M.D., Assistant Psychiatrist, Municipal Court, Psychiatric Institute.

The fortieth Annual Meeting of the Women's Medical Society of New York State was held in Buffalo, May 4 and 5. The program was as follows:

Sunday, May 4: "Brunch" at the home of Dr. Harriet Hosmer; Buffet Supper at the home of the President, Dr. Helen G. Walker. Monday, May 5, Hotel Statler, Fillmore Room: Councillors' meeting and registration, business meeting and election of officers, and luncheon. Scientific Session: "Modern Approach to Preoperative Treatment of Thyroid Disease," Dr. Helen Heiman. Discussion: Dr. Ellen H. Eckstein. "Streptomycin Therapy in Tuberculosis," Dr. Helen G. Walker. "Istopes as Related to Medicine," Dr. Alice Murray. Discussion: Dr. Annabelle Miller. Evening: Reception at the home of Dr. Jennie D. Klein.

American Society for the Study of Sterility

The third annual convention of the American Society for the Study of Sterility will be held at the Hotel Strand, Atlantic City, N. J., on June 7 and 8, 1947, preceding the annual session of the American Medical Association. The general purpose of the meetings will be to convey to the physicians treating marital infertility an overall picture of the latest advances in reproduction. The program will include original papers, round-table discussions, scientific exhibits, and personal demonstrations. The sessions will be open to all members of the medical and allied professions. Additional information may be obtained from the secretary, Dr. John O. Haman, 490 Post Street, San Francisco 2, Calif.

Current Publications of Women in Medicine and in Allied Fields

Schmideberg, Melitta: The treatment of psychopaths and borderline patients. Am. J. Psychotherapy, *1*:45-70, Jan. 1947.

The author describes her technique with "difficult" patients who cannot be treated by classical analysis. She has treated over a hundred patients of this type, including about 25 definitely psychotic ones and in almost every case there was at least some improvement. A series of cases is described at great length.

McNeal, Alice: The problem of the anesthesiologist in dealing with the malnourished patient. South. Surgeon, *13*:99-110, Feb. 1947.

(From Medical College of Alabama.)

The problems which arise for the anesthesiologist when surgical interference is unavoidable in the presence of malnutrition are dependent on the damage that various systems or parenchymatous organs of the body have suffered. The causes of malnutrition are here summarized and the clinical picture of some of the "deficiency" diseases is presented. The conditions of malnutrition which most influence the choice of anesthetic are: liver damage, anemia, myocardial damage, hypo- or hypertension, thyrotoxicosis and renal damage. Preoperative preparation of the patient, and indications and contraindications for the most commonly used anesthetics are discussed. A suggestion for future experimentation is made.

Price, Dorothy Stopford: The prognosis of primary tuberculosis of the lung. Tubercle, *28*:27-31, Feb. 1947.

(From St. Ultan Hospital, Dublin.)

Pathological, clinical and epidemiological evidence is examined to discover the relationship of primary tuberculosis to pulmonary tuberculosis. The relationship is found to be of importance, in that healing of the primary complex will prevent the development of the more serious forms of tuberculosis.

Meyer, Frieda L. (Ph.D.) et al: Nitrogen balance and blood volume studies in man during and following repeated plasma transfusion. Am. J. M. Sc., *213*:160-169, Feb. 1947.

(From Woman's Medical College of Pennsylvania.)

Nitrogen balance, plasma volume, protein and hematocrit determinations were carried out on three male subjects given an adequate carbohydrate, mineral, and vitamin intake by mouth and protein by plasma transfusion for a period of five days. Previous to and following the transfusion, protein was given by mouth in the form of a hydrolysate of casein. The findings are given in detail. Two of the subjects showed an anemia following the plasma transfusions as evidenced by a decrease in calculated circulating red cell volume.

Kennard, Margaret A.: Autonomic interrelations with the somatic nervous system. Psychosomatic Med. *9*:29-36, Jan.-Feb. 1947.

(From the Departments of Anatomy and Psychiatry, New York University Medical School.)

Anatomical and functional interrelations between the autonomic and somatic nervous systems can be demonstrated at many levels of the nervous system from peripheral nerves to cortex. Affective reactions, or emotions, are known to produce responses in both autonomic and somatic nervous systems. These interactions take place chiefly through integration within regions containing the extrapyramidal representation of the forebrain. By means of this organization the somatic motor system reacts as a whole to emotional stimuli.

Wilhelm, Freda; Hirsh, H. L., et al: The treatment of acute bacterial endocarditis with penicillin. Ann. Int. Med. *26*:221-230, Feb. 1947.

(From the Georgetown and George Washington University Medical Divisions, Gallinger Municipal Hospital, and the Departments of Medicine, Georgetown University and George Washington University.)

Eight patients with acute endocarditis were treated with penicillin. Three with staphylococcic endocarditis recovered, while four patients with staphylococcic and one with pneumococcic endocarditis died. In the presence of symptoms of infection, the diagnosis of acute endocarditis should be entertained and repeated blood cultures taken. The usual acute fulminating course of this disease makes it mandatory that penicillin therapy be instituted early if success is to be achieved.

Melnick, Joseph L. and **Horstmann, Dorothy M.:** Active immunity to poliomyelitis in chimpanzees following subclinical infection. J. Exper. Med. *85*:287-303, March 1947.

(From the Section of Preventive Medicine, Yale University School of Medicine, New Haven.)

Subclinical infection was produced in eight chimpanzees by the administration of virus orally or intracutaneously and was measured by the production of a virus carrier state and the development of neutralizing antibodies. Immunity was tested by attempting to induce the carrier state again by a challenge dose of virus by the same routes. With an homologous strain as the challenge virus, immunity as defined here was produced in each of four chimpanzees tested. Neutralizing antibodies to the homologous strain were present about one month following the first exposure to virus by either the oral or cutaneous route. In another group of two chimpanzees, one developed neutralizing antibodies and immunity to heterologous strains and one did not.

Woodard, Helen Quincy: The interpretation of phosphatase findings in carcinoma of the prostate. New York State J. Med. *47*:379-381, Feb. 15, 1947.

(From the Chemical and Urological Departments, Memorial Hospital, N. Y.)

The properties of different types of phosphatases

are discussed. Conspicuous elevations in serum acid phosphatase appear to be pathognomonic of metastasizing carcinoma of the prostate. Normal readings do not exclude this diagnosis. Evidence derived from acid phosphatase studies on the serum and tissue of patients receiving endocrine treatment indicates that prostatic cancer undergoes a profound biochemical alteration after prolonged existence in the feminine organism. In bones which are the site of metastases from prostatic carcinoma, the response to surgical castration appears to be different from that to estrogen therapy.

Wyvell, Dorothy B.: Penicillin therapy in congenital syphilis. Texas State J. Med. *42*:578-581, Feb. 1947.

(From the Department of Pediatrics, Southwestern Medical College, Dallas, Texas.)

A report of 40 syphilitic children who received sodium penicillin. Except where indicated, no other specific therapy was used, but all received supportive pediatric care. The author concludes that penicillin shows promise of being a very effective therapeutic agent in congenital syphilis. The optimum total dosage and duration of administration are undetermined.

Diggs, L. W. and **Sirridge, Marjorie S.:** A study of the sternal marrow and peripheral blood of 55 patients with plasma cell myeloma. J. Lab. & Clin. Med. *32*:167-177, Feb. 1947.

(From the Department of Clinical Pathology, Hematology Laboratory, Cleveland Clinic Foundation, Cleveland, Ohio.)

It is the purpose of this paper to summarize the cytologic characteristics of the bone marrow and blood in plasma cell myeloma as revealed in the published literature and in marrow and blood films of 55 patients with the disease observed at Cleveland Clinic. The diagnosis was established by combined clinical, laboratory, radiologic, and marrow findings. Patients with unsatisfactory marrow preparations, with inadequate followup, and in whom the diagnosis was doubtful were excluded. Patients with an increase in plasma cells in the peripheral blood (plasma cell leucemia) also were included in the series. The study lends support to the following theses which have been proposed by others: 1) Plasma cells arise from reticulum cells; 2) Plasma cells constitute a distinct strain of cells morphologically different from myeloid, lymphoid and erythroid types; 3) There is no sharp line of demarcation between solitary plasmocytoma, plasma cell myeloma and plasma cell leucemia.

Schmitz, H. E. and **Towne, Janet E.:** Radium and roentgen therapy in the treatment of menopausal uterine bleeding. Am. J. Obst. & Gynec. *53*:199-204, Feb. 1947.

(From the Mercy Hospital, Loyola University Clinics, Chicago.)

The material is based on a survey of 412 consecutive records covering a 5-year period from 1939 through 1943. This gives a range of 2 to 7 years follow-up in which to formulate later conclusions. of the 412 patients, 116 cases, or 28.15 per cent, received treatment with the roentgen ray while in 296 women, or 71.8 per cent, the radium application was used. The authors conclude that in bleeding uteri due to benign causes the method of treatment in well-selected, uncomplicated cases is radiation therapy.

Osgood, E. E. and **Graham, Sarah M.:** A simple rapid method for assay of bactericidal and bacteriostatic agents with technics for assay of penicillin, streptomycin, etc. Am. J. Clin. Path. *17*:93-107, Feb. 1947.

(From the Division of Experimental Medicine, Department of Medicine, University of Oregon Medical School, Portland.)

Numerous methods for the assay of penicillin have been suggested, but the very multiplicity of these methods and the complexity of the modifications indicate that none is entirely satisfactory. The technic outlined in this article is the result of investigations undertaken to obviate some of these difficulties.

Zawisch, Carla: Marble bone disease; a study of osteogenesis. Arch. Path. *43*:55-75, Jan. 1947.

(From the laboratories of the Jewish Hospital, Philadelphia.)

This is not intended to be a presentation of a case of marble bone disease. It is an attempt to study a comparatively rare congenital bone disease from the moment of its onset in intrauterine life and through its further stages. The case which served for the present study was published by Windholz, in 1931, and after death bone specimens became available for examination. They are described in great detail, with illustrations.

Salomon, K., Gabrio, B. W., Reinhard, E., and **Silberg, Ruth:** Effects of estradiol benzoate and their modification by bleeding. Arch. Path. *43*:76-85, Jan. 1947.

(From the Department of Radiology, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.)

Injections of 0.84, 2.28 and 3.36 mg. of estradiol benzoate failed to raise the plasma calcium level of sexually immature cockerels above the normal limits of variation The estrogen caused inhibition of growth and breakdown of the epiphyseal cartilage and produced myelofibrosis and hyperossification of the metaphyses and the areas close to the endosteal surfaces of the shaft. Cockerels that had been bled prior to and during the administration of the estrogen showed a tendency toward increased myelofibrosis and bone formation.

Wuerthele, Virginia: Scleroderma treated with promin. J. M. Soc. New Jersey, *44*:52-53, Feb. 1947.

The purpose of this report is to record the dramatic effect of a new drug on a well established case of scleroderma. The drug used was sodium diaminodiphenyl sulfone, packaged by Parke-Davis under the trade name of "Promin."

Magnuson, P. B., McElvenny, R. T., and **Logan, Catharine E.:** A clinical study of 180 cases of arthritis: the use of steroid complex (Whittier), orthopedic and other supportive measures in chronic arthritis. J. Michigan State M. Soc. *46*: 71-76;89, Jan. 1947.

(From the Department of Orthopedics and the Montgomery Ward Clinics, the Medical School, Northwestern University, Chicago.)

This report deals with a total of 180 chronic arthritic patients treated and followed by the Special Arthritis Clinic and the Department of Bone and Joint Surgery, Northwestern University, during the past four years. The total was divided into two groups: in the first the treatment was primarily medical; in the second the medical management was directed at preparation for subsequent orthopedic surgery. The results are given in tabular summaries.

Whitbourne, Dahlia: Nutritional retrobulbar neuritis in children in Jamaica. Am. J. Ophth. *30*:169-171, Feb. 1947.

(School Medical Officer, Kingston, Jamaica, B.W.I.)

This is a report of observations on 74 cases of retrobulbar neuritis treated at the School Clinic in Kingston during the year 1945. Due to war conditions it was not possible to carry out a standard treatment. Brewers yeast and cod liver oil were used and finally trade preparations of the vitamin B complex were purchased. A few cases received thiamine or riboflavin but no satisfactory conclusions could be drawn from these. Parents were encouraged to add milk, eggs and vegetables to the diet. Fifth of the patients made satisfactory progress, and 26 recovered.

MacMahon, H. E., Murphy, A. S. and **Bates, Margaret I.:** Sarcoma of the liver: disadvantages of thorotrast as a diagnostic agent. Rev. Gastroenterol. *14*:155-159, March 1947.

(From the Department of Pathology and Bacteriology, Tufts College Medical School, Boston, and the Cambridge Hospital, Cambridge, Mass.)

This case is reported for the second time before the National Gastroenterological Association. Three years ago it appeared under the title of "The Diagnostic Advantages of Thorotrast." Two years later the patient died. A careful study at the time of death showed evidence of severe aplastic anemia and a primary sarcoma of the liver. Intelligent restraint should be exercised in the use of thorotrast as a diagnostic agent, and the indiscriminate use of radioactive substances in medicine should not be tolerated.

Odlum, Doris M.: Some observations on the reaction of children to wartime conditions as seen in a child guidance clinic. Ztschr. f. Kinderpsychiat. *13*:175-180, Jan. 1947.

(Physician in charge of the Psychiatric Department of the Royal Victoria and West Hants Hospital, Bournemouth, and Medical Director of the Child Guidance Clinic.)

The reactions to wartime conditions included emotional reactions to air raids, emotional reactions to evacuation, emotional disturbances and behavior disorders, delinquency, stammering, and speech defects. These difficulties are all in process of solution and in the course of a year or two most of them will probably begin to disappear. There will, however, be a continuing need for child guidance clinics and for greatly increased facilities for the detection and treatment of all types of emotional instability in the child population.

Webster, Augusta: Periodic physical examinations in apparently well women. Illinois M. J. *91*:92-96, Feb. 1947.

The idea of periodic physical examinations in apparently well individuals is not new. Dr. Elise L'Esperance, in 1937, pioneered by establishing the first clinic for complete examinations of well persons, with special reference to cancer, at the New York Infirmary for Women and Children in New York. Wishing to establish a similar service in Chicago, the Executive Committee of the American Cancer Society requested the author to try to interest a group of women doctors in the project. This article described the founding and procedure at this clinic, with tables giving details of the findings.

Rotman-Kavka, Georgine, Hirsh, H. L., and Dowling, H. F.: A comparative study of penicillins X and G and crystalline penicillin. New England J. Med. *236*:314-318, Feb. 27, 1947.

(From the George Washington Medical Division, Gallinger Municipal Hospital, and the Department of Medicine, George Washington University School of Medicine, Washington, D. C.)

A comparison of the properties of penicillin X, crystalline penicillin G and commercial penicillin G demonstrated that penicillin X achieves and maintains higher blood concentrations than the injection of similar amounts of penicillin G, whereas there is no essential difference between the crystalline and commercial penicillin G in this respect. The therapeutic effects of all three preparations are similar, with a few exceptions. The incidence of toxic reactions was low and independent of the types of penicillin employed. It is concluded that in practically all infections caused by penicillin-sensitive organisms there is no obvious clinical difference between the effectiveness of the penicillin X and G fractions.

Eilert, Mary Lou: Adverse reactions to the sulfonamides and antibiotics. M. Clin. North America, pp. 31-42, Jan. 1947.

(From the Department of Medicine, University of Chicago.)

Four cases of reactions to various sulfonamides and three cases of reactions to penicillin are presented and discussed. Although it is not the purpose of the paper to discourage intelligent use of these valuable antibacterial agents, an effort has been made to stress the fact that sulfonamides have been associated with severe and even fatal reactions whereas reactions to penicillin so far have been annoying rather than life endangering. This would seem to indicate that penicillin, when available, should be the treatment of choice for infections caused by susceptible organisms. The use of either group of drugs unnecessarily, particularly in the form of local therapy, is to be discouraged because of their strong sensitizing potentialities.

Potter, Edith L.: The Rh factor. M. Clin. North America, pp. 236-242, Jan. 1947.

(From the Department of Obstetrics and Gynecology, University of Chicago School of Medicine.)

In a previous paper published in 1944 the author briefly summarized the facts which were then known concerning the Rh factor and a later paper that same year dealt with the subject more exhaustively. Since then several excellent reviews have appeared. The present paper is an attempt to call attention to some of the more recent developments. For more detailed information the original papers should be consulted.

Brainerd, Henry and **Bradley, Elizabeth:** Treatment of bacterial meningitis with penicillin, sulfonamides and sera. California Med. *66*:57-62, Feb. 1947.

(From the Divisions of Medicine and Pediatrics, University of California Medical School; the Department of Pediatrics, Stanford University School of Medicine; and the Department of Public Health, San Francisco.)

An account of 250 cases of bacterial meningitis admitted to the Isolation Division of the San Francisco Hospital, Jan. 1943-Feb. 1946. The relative efficacy of sulfonamides, penicillin, and sera, as well as combinations of these agents, is estimated in various forms of meningitis. The effects of various factors on the prognosis of meningitis are analyzed. A plan of treatment for each type of meningitis is promulgated according to these data.

Bush, J. A. K., Lenox, Cora C., and Myers, H. C.: Volculus neonatorum. South. Surgeon, *13*:205-208, March 1947.

(From the Myers Clinic Hospital, Philippi, West Virginia.)

A case of torsion of the whole mesentery of the small intestine is presented because of its rarity and other features of interest. Vomiting is an early and persistent symptom and should arouse suspicion of high intestinal obstruction. Roentgenograms with or without contrast media should be used to verify clinical suspicions. As soon as the diagnosis can be established and fluid balance regulated, these cases should be subjected to surgery.

Spears, Mary M., and Pfeiffer, Mildred C. J.: Anion exchange resin and peptic ulcer pain. Gastroenterology, *8*:191-198, Feb. 1947.

(From the Department of Gastro-enterology and Proctology of the Woman's Medical College of Pennsylvania.)

The effect on peptic ulcer pain of an anion exchange resin has been studied in a group of 30 patients, all but one experiencing pain relief. Relief of pain was not synonymous with healing of the ulcer, but in some cases healing did occur. In a few cases the ulcer situation became worse while the patient was under treatment. No serious toxic effects from the use of the resin were noted. Pain relief was observed in cases in which no ulcer was demonstrated. Preliminary study of acid changes within the stomach of certain patients in the presence of the resin were not conclusive. An insoluble, non-absorbable anion exchange resin, having properties of speedy action and great acid neutralizing powers, which inhibits pepsin activity; which causes no acid rebound, no constipation, and no removal of phosphate or chloride ions from the body fluids, and which has but a slightly unpleasant taste, should be of value to patients with peptic ulceration and is worthy of further clinical trial.

Erika Bruck: Agranulocytosis in childhood. Am. J. Dis. Child. *73*:186-194, Feb. 1947.

(From the Children's Hospital Research Foundation and the Department of Pediatrics, University of Cincinnati College of Medicine.)

A case of agranulocytosis of unknown causation in a two-year-old girl is presented. The number of granulocytes in the blood varied between 0 and 84 per cubic millimeter for 11 days. Six examinations of the bone marrow were done; at the height of the disease, hypolastic bone marrow with lymphocytic reaction was found. The clinical manifestations consisted of fever, prostration, pneumonia, a recurrent erythematous rash and necroses of the mucous membranes of tonsils and lips. Penicillin, blood transfusion, crude liver extract and small doses of pentnucleotide were used in the therapy. The child recovered.

The etiologic classification, differential diagnosis and therapy are discussed.

Sheridan, Viola E., and Parker, R. L.: Development of heart block in the neonatal period. Am. J. Dis. Child. *73*:199-203, Feb. 1947.

(From the Mayo Foundation, Rochester, Minn.)

One of the unusual features of the case presented was the progressive development of the complete heart block. Review of the tracings reveals that the earliest indication of cardiac arrhythmia was present a few days after birth. When the infant was 16 months of age, complete auriculo-ventricular dissociation was present. The basis for the progressive change in the degree of heart block is a matter of speculation, but it seems logical to assume that, with the increased demand on the heart subsequent to birth and with the progressive cardiac enlargement, the poorly developed conductive system was unable to maintain continuity.

Lewis, Jessica H., Taylor, F. H. L., and Davidson, C. S.: Protein nutrition: the therapeutic use of a digest of liver protein, especially in patients with cirrhosis of the liver. New England J. Med. *236*: 351-359, March 6, 1947.

(From the Thorndike Memorial Laboratory, Boston City Hospital, and Department of Medicine, Harvard Medical School.)

A partial enzymatic digest of liver protein was administered as a food supplement to 65 patients. The liver protein digest supported positive nitrogen balance or nitrogen equilibrium when given as the chief source of protein to 5 normal subjects and 4 malnourished patients. The results in 19 patients with portal cirrhosis of the liver were at least as satisfactory as those attained with other means of supplying nutrients. The recovery of five patients with infectious hepatitis progressed satisfactorily. It proved to be an adequate protein supplement for 4 of 5 patients with severe thermal burns. The results in 3 cases of peptic ulcer were excellent. Fourteen patients with malnourishment from various causes received the liver protein digest, and marked improvement was observed in 11.

Edmondson, H. A., Martin, Helen Eastman, and Evans, Newton: Necrosis of renal papillae and acute pyelonephritis in diabetes mellitus. Arch. Int. Med. *79*:148-175, Feb. 1947.

(From the Departments of Pathology and Internal Medicine, School of Medicine of the University of Southern California, the Department of Pathology of the College of Medical Evangelists, and the Laboratory of the Los Angeles County Hospital.)

Acute necrosis of the renal papillae was observed in 29 of 859 diabetic subjects in a series of 32,000 necropsies. The diabetic state, renal vascular disease and poor blood supply of the papillae are apparently contributing factors in the pathogenesis. In the same necropsy series, papillary necrosis was noted in 21 of 1,023 patients with pyelonephritis who were not diabetic; in 20 it occurred as a complication of urinary obstruction, which was most often due to disease of the prostate gland.

Criteria for the diagnosis of papillary necrosis in diabetic patients cannot be rigidly defined but should include hematuria, renal colic, unexplained coma, and sudden increase in severity of symptoms of known pyelonephritis. Retrograde pyelograms are usually diagnostic. Treatment should be directed toward preventing infection by early use of chemotherapy.

Baber, Margaret D.: Amyloid macroglossia: report of a case. Lancet, *1*:210-211, Feb. 8, 1947.

The association of macroglossia with amyloidosis is extremely rare, only 3 cases having been published in the medical literature of England. The features of the present case are remarkably similar to those previously described, and no new light is thrown on the obscure etiology of the condition.

BOOK REVIEWS

(EDITOR'S NOTE:—*These reviews represent the individual opinions of the reviewers and not necessarily those of the members of the Editorial Board of this* JOURNAL.)

THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS. By John Albert Key, B.S., M.D. Clinical Professor of Orthopedic Surgery, Washington University School of Medicine; Association Surgeon, Barnes, Children's and Jewish Hospitals, and H. Earle Conwell, M.D., F.A.C.S., Birmingham, Ala. Fourth edition. $12.50. 1322 pp. The C. V. Mosby Co., St. Louis. 1946.

According to the preface of the fourth edition of this well known textbook, the authors have incorporated lessons learned in war surgery and "changes brought about by the natural progress of the science of medicine." The chapters on compound fractures, and injuries of the spine and of the hip have been altered in the light of recent advances. Throughout the book the authors present various recognized methods of treatment but emphasize quite justifiably that which they prefer. Others may not agree in every instance. For example, many believe that it is not necessary in an adult to immobilize an undisplaced fracture of the radial head from two to four weeks. The section on Volkmann's ischemic paralysis might well include some discussion of arterial spasm as an etiological factor. One thing which the authors might improve in a subsequent edition is the illustration of the reduction of an ankle fracture. It is clearly pointed out in the test that the knee should be flexed but the maneuver is illustrated with an extended leg (p. 1203, Fig. 1200). But these are minor points. The text is clear, the illustrations are graphic, and the book is heartily recommended. The presentations are conservative throughout. This is particularly notable in the discussion of open reduction and internal fixation of fractures of the long bones. While it is true that this method should be used only by adequately trained and experienced surgeons, supplemented by efficient organization and suitable armamentarium, many of those familiar with the method will strongly disagree with the statement that union is slower after proper internal fixation and with the idea that it must be supplemented by external splintage.

—BARBARA B. STIMSON, M.D.

ALLERGY IN PRACTICE. By Samuel M. Feinberg, M.D., Associate Professor of Medicine and Chief of the Division of Allergy, Northwestern University Medical School, Chicago. With the collaboration of Oren C. Durham, Chief Botanist, Abbott Laboratories, North Chicago, Illinois, and Carl A. Dragstedt, Ph.D., M.D., Professor and Chairman of the Department of Pharmacology, Northwestern University Medical School, Chicago. Second edition. Cloth. Price $10.50. Pp. 838 with 35 illustrations. The Year Book Publishers, Inc., 304 S. Dearborn St., Chicago 4, 1946.

This is the second revised edition, the first having been published in 1944. It is a book designed to bring up to date all material on allergy, both for practical, clinical application and as a reference book. It reviews the history of the specialty, experimentation on animals, and general causes of allergic diseases, and then goes on in specific detail covering the diagnosis, treatment, and management of all allergic conditions.

Mr. Oren C. Durham, Chief Botanist of the Abbott Laboratories, has written the chapter on Pollens and Pollen Allergy. It is a long chapter, packed with detailed and practical information on the geographical distribution and seasonal variations of these plants all over the world, well illustrated and with explanations of methods of determining and counting the pollens in samples of air.

Carl A. Dragstedt, Ph.D., M.D., Professor and Chairman of the Department of Pharmacology, Northwestern University Medical School, has written a review, in chapter 29, of Histamine in Anaphylaxis and Allergy.

The sections on Allergy to Fungi are excellently done in great detail. There is a discussion of the importance of foods in asthma, but it is disturbing to have the Rowe diets quoted, since experimentation has, for the most part, not found them practicable. There are a large number of other diets lists and recipes given as well.

The term "Atopic Dermatitis" is used to describe "a skin inflammation of an allergic nature and of internal origin" and "desensitization" treatment is advised. The use of the terms "allergic," "dermatitis," and "immunizing" treatment

might be more accurate. A few prescriptions are given for local application and management and treatment are well stated.

The book is generally satisfactory as a practical guide to diagnosis and treatment of allergic disorders and the chapter on pollens is a compact, exhaustive, and convient review of the subject.

—Leoni Neumann Claman, M.D.

INSIGHT AND PERSONALITY ADJUSTMENT: A Study of the Psychological Effects of War. By Therese Benedek, M.D., Institute for Psychoanalysis, Chicago. Price $4.00. Pp. 307. The Ronald Press Company, 15 E. 26th St., New York, 1946.

With deep understanding, this book deals with the complex emotional relationships within the family of today, and how they have been affected by the war. Dr. Benedek writes with a commonsense simplicity which was achieved only through an unrivalled experience in the field as physician, wife, and mother in two world wars, and as a psychoanalyst known for her outstanding research in the psychology of women and the family.

The title is a little misleading, for actually the book has a very wide application and should be read by all those interested in the problems mentioned, and especially by readers of this journal, most of whom work with women and children. The chapters on love, marriage, adolescents, and the woman of today and the changing relationships between the sexes will prove particularly valuable to those who deal with such problems in the practice of general medicine, obstetrics and gynecology, and pediatrics, as well as psychiatry. Those physicians who work with social agencies such as those which provided much of the case material will find the book indispensable in understanding the social tensions in the family of today which affect the physical well-being of the patient.

The growing awareness of the relationship of emotional problems to the practice of medicine (psychosomatic medicine) and the public interest in psychiatry as shown in the flood of books, moving pictures, and articles on the topic make it imperative that the physician understand and be able to guide and counsel the patient. For the woman physician who in many cases is much closer to these problems this is especially true. Much of the professional literature in the field is either quite technical and cannot be utilized except by the specialist, or is too superficial to be of practical value. No other book offers this basic orientation in psychoanalytic concepts in terms which all can understand from their own experience. For this reason, many patients too can be referred to this book for help with problems centering around marriage and the family, and their own emotional needs.

The book is divided into four parts. In the first, the love relationship is discussed, and the emotional development of the individual within the family is traced in an outstanding exposition of basic concepts regarding personality growth. This section should be read by all physicians. The next section, on the soldier, will be of interest mainly to those physicians who work with veterans. The last two sections devoted to family and the changing relationships between the sexes will be of interest to the woman physician not only because of her profession but also because of her own position in society as a woman with problems of her own.

—Zelda Teplitz, M.D.

HARVEY CUSHING (A Biography). By John F. Fulton, M.D., Ph.D., LL.D., New Haven, Sterling Professor of Physiology, Yale University School of Medicine. 754 pp., 150 illustrations. Cloth, $5.00. Charles C. Thomas, Springfield, Ill. 1946.

No biographer has ever had as much help from his subject as John Fulton. All his life Dr. Cushing kept extensive diaries and preserved his correspondence, which give the reader an insight into the personality of the man. Harvey Cushing is noted for his early use of x-rays, blood pressure readings, and electric cautery in brain surgery. In the literary field he was also well known for his Pulitzer Prize winning "Life of Sir William Osler," his "From a Surgeon's Journal," and his collections of essays. Some of the pen and ink sketches which illustrated his diaries and proved the presence of an artistic talent are reproduced in this book.

Cushing was a perfectionist in everything he did. He was always driven by the desire to do better, in his surgery, writing, drawing, and athletics. This desire was transmitted to all that came in contact with him. All of Harvey Cushing's papers which were so carefully preserved have been condensed and edited into a biography which will proved interesting to the doctor and layman alike.

—Eleanor J. Murphy, M. D.

Opportunities For Medical Women

H. E. THELANDER, M.D.

"Medical Education and the Changing Order" by Raymond B. Allen is a small volume giving the results of the studies by the committee of the New York Academy of Medicine appointed to survey medical education and its application to a changing world. The book was published by the Commonwealth Fund in 1946. The author, Raymond B. Allen, M.D., Ph.D., then the Executive Dean of the College of Dentistry, Medicine, and Pharmacy, University of Illinois, is now the President of the University of Washington State.

The book, in separate chapters deals with such subjects as "The Challenge to Medical Education," "Medical Education and the Contemporary Social Process," "American Medicine in Tomorrow's World." The full impact of the volume, however, can be felt only by reading it, which is not a tedious process since its 136 pages are crammed with interesting facts and philosophy. A few quotations from its pages (the general theme of which is "It takes a man, not a machine, to understand a man") will illustrate the tone of the book. "It should be the aim of medical education to prepare him to fill this broader role as a responsible leader in the community, one who thoroughly understands the social, industrial, and economical patterns of which he is a part." "It (the medical profession) is under obligation, however, to co-operate fully with voluntary and public agencies so that together they may create the economical and social conditions which make possible an adequate medical service for all." "Physicians as a group appear to have been too preoccupied, too busy, or possibly lacking in sufficient educational preparation to approach with any vigor or social insight the broader problems creating those conditions within which people may enjoy the benefits of truly healthful living."

The book is reviewed in these pages partly because its contents should become familiar to every physician in the United States and partly because if its significance is wholly grasped every woman physician should feel a resurgence of enthusiasm for what she might contribute to this changing order.

The science of medicine in health and disease has reached a stage not only where the best scientific achievements should be made available to all, but positive health, the full enjoyment of a healthy body and a well integrated personality, should be our birthright. The interpretation of the achievements of science to the public and the application of our knowledge for the improvement of our culture should be of particular interest to women physicians. If there is any fundamental difference between the two sexes it is in woman's intuitive grasp of human relations in contrast to man's aggressive, creative instincts. In this country medical men have clung more tenaciously to the point of view that medicine was a man's field than in any other nation or in any other field of endeavor. Women in medicine even today do not enjoy the mental comfort and ease of full acceptance on the basis of merit that they do, for instance, in the fields of penmanship, theater, or art. In the medical sciences, even though phenomenal advancement has been made and no other country enjoys as good medical care as our citizens, the anomalous situation occurs that physicians are severely criticized by the lay public; magazines, newspapers, books, and movies are trying to interpret medical concepts to an avid population; and politicians are trying to change the entire medical framework by means of which this phenomenal progress has been made. Is it possible that our medical science has been too heavily weighted with masculinity? Possibly it needs the feminine intuitive understanding to apply and disseminate fully the accumulated knowledge.

The woman physician who marries and has a family has always been the butt of severe criticism for "wasting" her medical training. If she marries a male physician, she often has been

encouraged to be ultra non-medical. Instead of this antiquated attitude, women physicians themselves, as well as their male confreres, should capitalize on the medically trained wife and mother and encourage her particularly to contribute of her experience and training to the welfare of her community. Every agency in a community directly or indirectly has a health angle. One needs only to mention a few examples such as school health, education of girls and boys for parenthood, health problems in children's institutions, camp regulations, movies, books, etc. If men and women would cease competing in medicine and instead recognize the peculiar contribution each might make to the whole picture, this nation could witness a renaissance in the field of physical and mental health.

Camp Doctor Wanted

For girls' camp in Maine, 40 miles from Portland. 125 campers ranging in age from 9 to 17. Season is two months—July and August. For further details write Mrs. Eugene Wolfe, Director, 6505 N. 8th St., Philadelphia 26.

Medical Schools Urged To Accept More Women Students

The National Federation of Business and Professional Women's Clubs is urging that American medical colleges take immediate action to lessen their discrimination against women.

These colleges, it is pointed out, limit women students to five per cent of the total registration, and have done so for the past twenty years. The figures appear in a report by Dr. Florence Lowther and Dr. Helen Downes of Barnard College, published in the Journal of the American Medical Association.

Miss Rochelle Rodd Gachet, commenting on the situation, said:

"On every hand we heard about the shortage of skilled medical personnel. Letting down the bars to women in our medical schools would seem to be a logical way of remedying the condition. English medical schools now admit women students to the extent of twenty per cent. Our own should at least match that figure."

Miss Gachet said that the survey made by Dr. Lowther and Dr. Downes disproves the old argument that women doctors drop their careers when they marry. She said:

"The Lowther-Downes survey shows that in seven leading eastern medical schools, 90 per cent of the women graduates who were investigated were in full-time medical work. Eighty-two per cent who had married had continued in full-time medical work. Investigation also showed that 24 per cent of these women graduates took advanced training to qualify as specialists, despite the obstacles women face in establishing themselves as specialists. These figures cover a period of 18 years.

"To quote directly from the survey—the evidence indicates that women physicians have amply justified their training, and that marriage has had a negligible effect on their professional activities. On the basis of the record, it would seem that American medical colleges might well consider accepting a higher percentage of women in the future.'"

* * *

Opthalmologic Prize Contest

The National Society for the Prevention of Blindness announces that papers submitted for the glaucoma prize of $50 offered in 1944 did not conform to the criteria set up by the ophthalmological committee selected to award the prize. Therefore, the prize is again offered for the most valuable original paper adding to existing knowledge about the diagnosis of early glaucoma or the medical treatment of non-congestive glaucoma. The criteria may be secured by writing to the National Society for the Prevention of Blindness, 1790 Broadway, New York 19, N. Y.

Papers may be presented by any practicing ophthalmologist of the Western Hemisphere and may be written in English, French, German, Italian, Spanish, or Portuguese. Those written in any of the last four languages should be accompanied by a summary in English. Closing date for receipt of papers is December 1947. The award will be made by the Society with the guidance of an ophthalmological committee composed of Doctors John N. Evans, chairman; Frank C. Keil, Daniel B. Kirby, John M. McLean, R. Townley Paton, Algernon B. Reese, Bernard Samuels, Kaufman Schlivek, Willis S. Knighton, Manuel Uribe Troncoso, David H. Webster.

A Medical

BY ALICE BARTLETT
AND CARROLL BIRCH

1 Theophile Hyacinthe Laennec invented the stethoscope May 1, 1819.
A training School of Nurses was opened at Bellevue Hospital, New York, May 1, 1873.

2 Dr. Jesse William Lazaer was born in Baltimore, Maryland, May 2, 1886. It was he who first succeeded in isolating the diplococcus of Neisser in pure culture in the circulating blood in a case of ulcerative endocarditis. He died of yellow fever, September 26, 1900, while working with the Yellow Fever Commission in Cuba.

3 Madame Curie discovered radium May 3, 1902.

4 The first issue of the *Southern Journal of the Medical Sciences* was published May 4, 1866.

5 The New York Infirmary for Women and Children was opened May 5, 1857.
On May 5, 1882, Pasteur demonstrated the protective power against Anthrax, using cultures attenuated by growth in higher temperatures.

6 On May 6, 1666, Richard Lower transfused the blood of one animal into another.
The first patent on a mechanical refrigerating machine was granted to Dr. John Gorrie on May 6, 1851.

7 On May 7, 1880, the Philadelphia Laryngological Society was formed.

8 Antoine Laurent Lavoisier was beheaded May 8, 1794.

9 St. Gregory, Bishop of Tours, was born May 9, 538. His most significant contribution to medicine is the description of a smallpox epidemic at Tours, 581, in his chronicle.
Amaurotic Family Idiocy (Tay-Sach's Disease): In 1880, Warren Tay gave the first description of the symmetrical changes which occur in the eyes in this disease. In 1887 Sachs of New York named the disease and gave the first complete description. *The Liverpool Medical Chirurgical Journal* for July, 1912, and the *British Medical Journal* for May 9, 1909, contain interesting articles about it, specially pointing out its hereditary tendency.

10 Augustin Jean Fresnel, a French physicist, was born May 10, 1788. In 1815, he became distinguished as the discoverer of the polarization of light.
The Early History of the Medical Profession in the County of Norfolk, Massachusetts, by Dr. Ebenezer Alden was published May 10, 1853.

11 State Charities Aid Association of New York State to act as a volunteer unpaid body of citizens for the improvement of public institutions of charity. Its form of association was completed on May 11, 1872, and Miss Louisa Schuyler was elected its first president.

May 11, 1896, Dr. MacIntyre of Glasgow showed the first radiograph of a stone in the kidney, which was later removed by operation.

12 On May 12, 1832, 1,371 deaths from epidemic cholera were reported in London.

13 The Society of Metropolitan Medical Officers of Health was inaugurated on May 13, 1856.

14 Gabriel Daniel Fahrenheit was born in Prussia, May 14, 1686. He was a maker of scientific instruments and in 1720 introduced the use of mercury instead of spirits of wine in the construction of the thermometer.

15 Florence Nightingale was born May 15, 1820.

16 Elie Metchnikoff of Russia and France was born May 16, 1845. He is chiefly notable for his contributions to the cellular theory of immunity. He also inoculated higher apes with syphilis, the first transmission of this disease to an experimental animal, and prevented the infection by the prophylactic use of calomel ointment.

17 James Lind of Scotland was born May 17, 1716. He was the founder of naval hygiene in England and is especially noteworthy for pushing the use of citrus fruits in the prevention of scurvy, advocating disinfection of clothing by heat for the eradication of typhus, using hospital ships in tropical ports, and devising the method of distilling sea water for use on ships.

18 Edward Jenner, the discoverer of vaccination, was born May 17, 1749.
A meeting of dentists favorable to the idea of forming a new dental society in Philadelphia was held at the office of Dr. Darby, 1513 Walnut Street,on Friday evening, May 18, 1894.

Calendar FOR MAY

19 Discovery of a cure for rabies was announced by Pasteur on May 19, 1884. The money value of the discoveries Pasteur made during his lifetime was estimated by Professor Huxley as sufficient to pay off the entire French national debt.

20 Robert Koch discovered Bacillus tuberculosis May 20, 1882.

21 American Association of the Red Cross was founded May 21, 1881. Clara Barton was elected president. Dr. Mary Harris Thompson was born at Fort Ann, New York, in 1829. She was known as the first woman who specialized in surgery and was remarkable for her splendid organizing and administrative ability. In 1865, she founded a hospital for women and children in Chicago. The Chicago Medical College Department of the Northwestern University conferred a degree on Dr. Thompson in recognition of her work, the only one it had ever granted to a woman. Dr. Thompson died May 21, 1895.

22 William Einthoven of Leyden, Holland, was born May 22, 1860. He spent twenty years perfecting the strong galvanometer, adapted to recording the finest of variations in the heart beat and nerve impulse. For this work on the electrocardiogram he received the Nobel Prize in Medicine in 1924.

23 William Aspinwall, an American physician, was born in Brookline, Massachusetts, May 23, 1743. He was a volunteer in the fight at Lexington and afterwards became surgeon in the Revolutionary Army, having partial charge of the Military Hospital at Jamaica Plains. After the war he became deeply interested in the subject of vaccination, and building a smallpox hospital at Brookline, established that remedy in American practice. He died April 16, 1823.

24 The first University degree was granted in medicine to Mr. W. Logie on May 24, 1833, from Montreal Medical Institution.

It is now 100 years since an adventurous young doctor named Christopher Carli, who had received his medical education at Heidelberg, pushed up the rivers of the New World to the territory that later became Minnesota. He arrived at the site of what is now Stillwater on May 24, 1841, and became the first civilian medical practitioner to settle permanently in the territory.

25 Samuel Bard of New York was born April 1, 1742 and died May 25, 1821. He co-operated with several other physicians in the organization, 1768, of a medical school in King's College, later Columbia University. His most important written contribution is his very accurate monograph on diphtheria.

26 Dr. Edward Cutbush was probably the first surgeon in the United States Navy to vaccinate against smallpox, May 26, 1808, at the time of an outbreak of smallpox at the Marine Barracks, Philadelphia.

A notorious episode in the long story of the difficulties in enacting proper laws for providing anatomical material concerns the case of President Benjamin Harrison's father, who died May 26, 1878. He was buried three days later in a cemetery in North Bend, Ohio. Several days later his son went to the Ohio Medical College at Cincinnati to search for the remains of a friend. There he found the body of his father. This incident was one of the factors which led to a revision of the Ohio Anatomy law in 1881, making proper anatomical material available to medical students. It should be emphasized that such incidents no longer occur anywhere now that bodies are obtained by legal processes.

27 The first record of anything like a sanitary measure issued by a layman in Southern California was on May 27, 1847, when Colonel J. Chevaz issued an edict "To spend three or four dollars to clean up the heads of remnants of cattle from the city and burn them after six o'clock and not throw filth in the streets," adding, that is why the epidemic (smallpox) lasts so long.

28 The Medical Department of the United States Army was incorporated May 28, 1781.

29 An entry in the diary of Charles II dated May 29, 1660: "His Majesty began to touch for the Evil according to custom thus: His Majesty sitting under his state in the banquetting house, the chirurgeons cause the sick to be brought or led up to the throne where they kneel; the King strokes their faces or cheeks with both hands at once, at which instance a chaplain in his formalities says, 'He put his hands upon them, and he healed them.' "

30 University of Marburg founded May 30, 1527, by Phillip (Landgrave of Hesse) First Protestant University.

31 On May 31, 1837, The Liverpool Medical Institute was opened.
On May 31, 1940, a monument was dedicated to Dr. John Hole, Revolutionary War Surgeon, at Centerville, Ohio.

News of Medical Women

Edited by ELIZABETH KITTREDGE, M.D.

Dr. Mary Latimer James is now a resident of Waterbury, Connecticut. For 23 years she was a medical missionary in China—from 1914 to 1937—during which time she saw China change from a 6th Century B.C. Society to a 20th Century Society, "and 20th Century Russia at that." In 1900, at the close of the Boxer Rebellion in China, Mary James was a student at Bryn Mawr. "At this time," she writes, "there came to me so definitely the inner conviction that my life-work lay in China as a medical missionary that not even the repeated insistence of the Mission Board physician for my church that I was not strong enough for this task could convince me." She graduated from the Woman's Medical College of Pennsylvania in 1907 and then interned at Memorial Hospital, Worcester, Massachusetts. Because the Mission Board would not send her to China, she allowed them to send her to Uintah Indian Reservation in Utah where she worked during 1909 to 1911. However, she was so sure that her life work lay in China, that she accepted an appointment from the Chinese Government as Staff Physician in Pei-Yang Woman's Hospital in Tientsin, 1912 and 1913. Once in China it was not difficult to get appointed as a medical missionary under the P. E. Church to the Diocese of Hanko. She was assigned to the Church General Hospital, in Wuchang, at the junction of the Yangtze and Han rivers, and here she served from 1914 to 1937 with the exception of three short furloughs, spent chiefly in post-graduate study. At first she was Superintendent of the Woman's Department, then later became Superintendent of the entire Church General Hospital. In 1926 Wuchang was bombarded by the Nationalists in a siege which lasted 40 days, and her hospital cared for the sick and wounded who were being continually brought in—almost every night at sunset there were air raids and finally the town gave in. The Communists took over; finally the situation became so difficult during the next year that all foreign countries evacuated their citizens, and Dr. James took a badly needed rest, touring New Zealand, Australia, and Java. But she soon returned to Wuchang to her hospital. She instituted a School of Nursing in 1914 and the first class took six years to train because the students had to be given a basic education as well. She also trained midwives because of the tremendous need and gave post-graduate courses for the nurses, teaching them to become technicians, anethetists, dental hygienists, and pharmacists. She also started Well-Baby Clinics and held a contest every spring thereafter for the healthiest baby. Dr. James states that the Chinese accept women doctors as readily as men, provided they

Dr. James

come from a Grade A Medical School. She is very fond of the Chinese people. They have a quiet way of working things out—they are patient and persevering. They glory not in their war heroes but in their philosophers and those who have done good for China. She agrees with General Marshall that the hope of China is in its young liberals, and has faith in Chiang Kai-Shek. In her report on the Church General Hospital in 1936, the last year before the Japanese invasion, she said: "Well worthwhile it is to help those who, in the midst of so many difficulties, are trying to help themselves. May it not be, in turn, the Chinese people, who, with their peace-loving forbearance, may help this troubled old world to work out new ways of co-operation? We of the newer nations can hardly appraise understandingly the mental and moral heritage of this ancient race. Too often we see only the superficial difficulties resulting from her recent contacts with our aggressive occidental civilization, with its materialistic superiority due to recent scientific development-difficulties of so new a nature that this vast country, with its enormous momentum, and attuned to quite a different key and tempo, has not yet had time to adjust. But China is awake now and struggling hard to right herself. If only we will co-operatively and

sympathetically help her, she may yet contribute no small share towards the adjustment of this distraught world. With her age-old spirit of unaggressiveness and her deep philosophy of life, she may—if only she can see and accept the true teachings of the Prince of Peace (not the distorted representations too often obtruded by our so-called 'Christian Nations")—help us to see and express that Way of Life which alone can bring the Kingdom of God on earth."

Dr. Lunette Powers, Northwestern Medical School, 1897, has been made an honorary life member of the Muskegon County Medical Society in recognition of her distinctive service to medicine.

Dr. Margaret Hardman, Boston P & S 1905, of Providence, R. I., has observed her 90th birthday. She is the oldest member of the Rhode Island State Medical Society and was, for many years, physician to the Providence School Department as well as the Providence and the Pawtucket Y. W. C. A.

At the Annual Career Conference held at Indiana University in March, Dr. Edith Haynes of the Medical Center discussed medical technology as a field for women.

Dr. Helen Langer, Director of the Mental Hygiene Clinic at the Silver Hill Foundation in New Canaan, Connecticut, discussed "Understanding the Younger Child," before two Education Study Groups of the Norwalk Branch of the A. A. U. W. Dr. Langer graduated from Yale, has been Attending Psychiatrist for Children at the Greenwich Hospital and in the Pediatric Department of the New York Hospital. She has also been resident Psychiatrist at the Vassar College Nursery Clinic.

Dr. Connie Guion is President of the Cornell University Medical College Alumni Association. She addressed the Association at the Alumni Day gathering on March 13, 1947.

Dr. Isabel Morgan, Ann Arbor, Michigan, has been appointed Acting Director of the Division of Maternal and Child Health of the State Health Department, West Virginia. She has been on the staff of the School of Public Health at the University of Michigan for the past two years.

Dr. Eloise Kailin, Washington, D. C., has recently been appointed Associate Editor of Allergy Abstracts, a section of the *Journal of Allergy*, which is the official publication of the American Academy of Allergy.

Dr. Maysil Williams is now Regional Consultant for the Kansas City Region of the Children's Bureau.

Dr. Catherine Q. Knop has opened her office for the practice of pediatrics in Washington.

The National Board of Medical Examiners lists three women on its Honor Roll for part one in 1946: Edith Beck, Yale; Ruth E. Cortell, Yale, and Anne Godley, Yale.

The State Board of Education of Virginia publishes a monthly magazine, "Work and Training," which is a part of the advisory guidance service rendered to the public schools of Virginia by the State Consultation Services. A recent number is devoted to the profession of medicine with a special paragraph on "Women in Medicine."

Dr. Dorothy Whipple lectured recently on the "Health of the Young Child in Group Care," under the sponsorship of the Director of the Arlington (Va.) Child Care Program with the co-operation of the Arlington Tuberculosis Association, the Arlington Pre-School Association, and the Federation of Co-operative Nursery Schools of Northern Virginia.

The following appointments in Brooklyn are announced by Dr. Weinstein, Commissioner of Health, New York City: Dr. Dorothy Oppenheim as District Health Officer at the Williamsburgh-Greenpoint Health Center. Dr. Oppenheim, who received her M.D. and her Masters in Public Health from Columbia, has been associated with the Department of Health since 1940. Dr. Anna E. Ray Robinson will head the Bedford Health District. Dr. Robinson obtained her M.D. from Cornell University Medical College. In her long association with the Department of Health, beginning in 1907 as a medical inspector, Dr. Robinson has served in many capacities, including epidemiologist, child health station physician, school physician, and assistant to the director of the Bureau of Preventable Diseases. She became a full-time district health officer in 1934.

Dr. L'Esperance was a speaker in a symposium on Women in Education, held at Salem College, Winston-Salem, North Carolina. "Although the trend now is to regard without discrimination all medical school graduates, whether men or women, the battle for equality is nowhere near won. . . . Women in medicine continue to constitute a very small minority." She asserted that women in general, through faith in women doctors, could stimulate equality.

Dr. Ellen Leong was the speaker at the March meeting of the Junior B. & P. Women's Club of Stamford. She told of her medical training at the University of Chicago and the Rush Medical College, and of teaching at a medical college in Shanghai. She and her husband, Dr. Tzu Pei Chou, were living in Honolulu at the time of the Pearl Harbor attack.

Dr. Emily P. Bacon, professor of pediatrics at Woman's Medical College of Pennsylvania, was presented with a check for $1,000—a gift to the Children's Clinic—by the Philadelphia Club of Advertising Women in March, 1947.

OBITUARIES

Dr. Louise C. Taylor, who held the rank of lieutenant in the Navy Medical Corps during the recent war, died March 21, 1947, at Belchertown State School, Massachusetts, where she was a senior physician. Dr. Taylor was graduated from the University of Vermont and its medical school.

Dr. Grace Dewey of Jacksonville, Illinois, died at Passavant Hospital, November 24, 1946. Dr. Dewey graduated from Johns Hopkins University Medical School in 1903. Her professional training also included a year of study at the University of Chicago, an internship at the Babies' Hospital, New York and a special course in radiology at the Rockefeller Institute of Medical Research. She was the first radiologist in Jacksonville and secretary of the first board of trustees of the Morgan County Tuberculosis Sanitorium, a board which had the task of the establishment of the present institution. She was also one of the founders of the Morgan County Tuberculosis League. She was a member of the first board of the State League of Women Voters in 1920 and, two years later, became the first president of the Morgan County League which she had ardently supported ever since. She was the first woman ever elected to the Board of Trustees of Illinois College where she gave valuable service until the time of her death.

Dr. Mary J. Walters of Washington, D. C., died March 7, 1947, at Lawson Veterans Administration Hospital. Dr. Walters was a graduate of the University of Pennsylvania Medical School, and was Associate of the Department of Medicine and Surgery at the Lawson V. A. Hospital since its reactivation in September. She served as a Captain in the Army Medical Corps during World War II.

Dr. Edith Ghosh, the well-known Calcutta obstetrician and gynecologist, died on January 16 from knife injuries received when attacked in her home by unknown men. Mrs. Ghosh graduated M.B. at Leeds University in 1923, and in 1937 she was elected a foundation member of the Royal College of Obstetrics and Gynecologists. She leaves her husband, Dr. B. C. Ghosh, former principal of Vidyasagar College, with two sons.

A colleague writes: "Dr. Edith Ghosh had won by her charm, ability and skilled service to all classes of the public a large place in the affections of Calcutta. She carried on a large practice with unsparing devotion and unstinted generosity. For many years she was in charge of the outpatient department of the Eden Hospital for Women, where she looked after the sick with skill and kindness and taught Indian students alike by example and clarity of teaching. In addition, she had many philanthropic and cultural interests. Many Servicemen will long remember her weekly salons where she dispensed tea and the best of good music at her home. During the war years she regained for many wounded and paralyzed men the use of their limbs by conducting rehabilitation courses at the Calcutta swimming-baths. Her own crippling accident of a fractured thigh three years ago did not prevent her specializing as an anesthetist, in which she attained great proficiency. For her qualities of heart and hand, her activities, and her reputation she stood out as one of Calcutta's best-known citizens."—From *The Lancet*, February 8, 1947.

Please, if anyone makes a speech, engages in research, publishes an article, passes a Specialty Board, receives an appointment, wins an award, moves, gets married, dies or does anything unusual, notify me. Pick up your pen, tap your typewriter, or cut the clipping and send to me promptly.—Elizabeth Kittredge, M.D., *Editor of "News of Medical Women," 3906 McKinley St., N.W., Washington, D. C.*

Investigators[1,2,3] characterize a buffered acid jelly as one of the simplest and most direct forms of effective therapy in vaginitis and cervicitis.

Clinically, the reestablishment of a normal vaginal pH (4 to 4.5) proves "extremely useful",[4] because it encourages "the elimination of pathologic organisms and the growth of normal vaginal flora consistent with the healthy vagina".[5]

Aci-Jel affords the physician a water-miscible, buffered acid jelly which is entirely non-irritant and may be used with safety over prolonged periods. It is available in 3¼ oz. tubes, with or without measured applicators, for professional use or prescription.

(1) Allen, E., and Baum, H. C.: Am. J. Obst. & Gyn., 48:1, 1943.
(2) Karnaky, K. J.: Texas State J. Med., 39:1, 1943.
(3) Christman, R. B. Jr.: J. Tennessee M. A., 35:685, 1942.
(4) Bland, P. B. and Rakoff, A. E.: Med. World, 58:508, 1940.
(5) Siegler, S. L.: Am. J. Obst. & Gyn., 48:1, 1944.

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BRIEF HISTORICAL NOTES ON MEAD'S CEREAL, PABLUM AND PABENA

HAND in hand with pediatric progress, the introduction of Mead's Cereal in 1930 marked a new concept in the function of cereals in the child's dietary. For 150 years before that, since the days of "pap" and "panada," there had been no noteworthy improvement in the nutritive quality of cereals for infant feeding. Cereals were fed principally for their carbohydrate content.

The formula of Mead's Cereal was designed to supplement the baby's diet in minerals and vitamins, especially iron and thiamine. How well it has succeeded in these functions may be seen from two examples:

(1) As little as one-sixth ounce of Mead's Cereal* supplies over 50% of the iron and 20% of the thiamine minimum requirements of the 3-months-old infant. (2) One-half ounce of Mead's Cereal furnishes all of the iron and 60% of the thiamine minimum requirements of the 6-months-old baby.

That the medical profession has recognized the importance of this contribution is indicated by the fact that cereal is now routinely included in the infant's diet as early as the third or fourth month instead of at the sixth to twelfth month as was the custom only a decade or two ago.

In 1933 Mead Johnson & Company went a step further, improving the Mead's Cereal mixture by a special process of cooking, which rendered it easily tolerated by the infant and at the same time did away with the need for prolonged cereal cooking in the home. The result is Pablum, an original product which offers all of the nutritional qualities of Mead's Cereal, plus the convenience of thorough scientific cooking.

During the last twelve years, these products have been used in a great deal of clinical investigation of various aspects of nutrition, which have been reported in the scientific literature.

Many physicians recognize the pioneer efforts on the part of Mead Johnson & Company by specifying Mead's Cereal and PABLUM—and also the new Pablum-like oatmeal cereal known as PABENA.

*Pablum, the precooked form of Mead's Cereal, has practically the same composition: wheatmeal (farina), oatmeal, cornmeal, wheat embryo, beef bone, brewers yeast, alfalfa leaf, sodium chloride, and reduced iron.